US Army Corps
of Engineers
HUNTSVILLE DIVISION

FINAL

Defense Environmental Restoration Program
for
Formerly Used Defense Sites

Ordnance and Explosive Waste
Chemical Warfare Materials

ARCHIVES SEARCH REPORT

FINDINGS

COLD SPRINGS PRECISION BOMBING RANGE MILITARY RESERVATION

Umatilla County, Oregon

Project No. F10OR017201

JUNE 1997 ~~1995~~

Prepared by
US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT

ORDNANCE AND EXPLOSIVE WASTE
CHEMICAL WARFARE MATERIALS
ARCHIVES SEARCH REPORT
FINDINGS
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TABLE OF CONTENTS

APPENDICES

REPORT PLATES

1.0 Introduction

1.1 Authority

In 1986, Congress established the Defense Environmental Restoration Program at 10 U.S.C. 2701 et.seq. This program directed the Secretary of Defense to "carry out a program of environmental restoration at facilities under the jurisdiction of the Secretary."

In March, 1990, the EPA issued a revised National Contingency Plan. Under 40 C.F.R. 300.120, EPA designated DOD to be the removal response authority for incidents involving DoD military weapons and munitions under the jurisdiction, custody and control of DoD.

Since the beginning of this program, the U.S. Army Corps of Engineers has been the agency responsible for environmental restoration at Formerly-Used Defense Sites (FUDS). Since 1990, the U.S. Army Engineering and Support Center, Huntsville, has been the Mandatory Center of Expertise and Design Center for Ordnance and Explosives.

On April 5, 1990, U.S. Army Engineer Division, Huntsville (USAEDH) was designated as the USACE Mandatory Center of Expertise (MCX) and Design Center for Ordnance and Explosive Waste (OEW). As the MCX and Design Center for OEW, USAEDH is responsible for the design and successful implementation of all Department of the Army OEW remediations required by CERCLA. USAEDH will also design and implement OEW remediation programs for other branches of the Department of Defense when requested. In cooperation with the Huntsville Division, the U.S. Army Corps of Engineers St. Louis District has been assigned the task of preparing Archives Search Reports for those Formerly Used Defense Sites (FUDS) suspected of ordnance and explosive waste (OEW) and chemical warfare materials (CWM) contamination.

1.2 Subject

The former Cold Springs Precision Bombing Range was utilized as the name states. Located in Umatilla County, Oregon, the only known improvements to the site were a three tower target and a pumphouse and well.

1.3 Purpose

This Archives Search Report (ASR) compiles information obtained through historical research at various archives and records holding facilities, interviews with persons associated with the site or its operations, and personal visits to the site. All efforts were directed towards determining possible use or disposal of OEW/CWM on the site. Particular emphasis was placed on establishing the type of munitions, quantities and area(s) of disposal. Information obtained during this process was used in developing recommendations for further actions at the site.

1.4 Scope

The entire site of the former range, consisting of 2,622.08 acres, was evaluated in assessing the potential for OEW contamination. It is designated as DERP-FUDS Site No. F10OR17200.

This report presents the history of the site, description and characterization of the immediate surrounding area, real estate ownership information, findings of a visual field survey, and OEW (CWM) site analysis, including an evaluation of potential ordnance contamination. A separate **Executive Summary** supplements these ASR FINDINGS and furnishes the CONCLUSIONS and RECOMMENDATIONS.

2.0 Previous Site Investigations

2.1 Corps of Engineers Documents

Under the Defense Environmental Restoration Program (DERP), the Portland District prepared a Findings and Determination of Eligibility (FDE), for the subject Cold Springs Precision Bombing Range, dated 13 September 1993 and approved 21 December 1993. The FDE indicates that the site evaluated, comprised of 2,622.08 acres, was acquired by lease and transfer in 1942. The FDE indicates that the site was disposed of by 1947. The District's review of real estate records did not reveal any restrictions, restoration, or recapture clauses. The report determined that the site was eligible for the Defense Environmental Restoration Program for Formerly Used Defense Sites under 10 U.S.C. 2701 et seq.

Included in the FDE is a Risk Assessment Code form assigning a score of 4 to the evaluated site. No mention of Certificates of Clearance for the ranges was found. A copy of the FDE is included at Appendix D-1.

2.2 Other Documents

No other site investigation documents were located.

3.0 Site and Site Area Description

3.1 Land Usage

3.1.1 Location

The former Cold Springs Precision Bombing Range is located in Umatilla County, Oregon, approximately 9 miles east of the City of Hermiston, Oregon. It is further identified as being situated in Sections 5,6,7,and 8 of Township 04 North, Range 30 East of the U.S.G.S Stanfield SE Quadrangle (7.5 Minute Series).

3.1.2 Past Use

Prior to U.S. Government acquiring the land, it was used for the grazing of livestock. The military used it for training bomber crews, as the name implies.

3.1.3 Present Use

The site is currently irrigated cropland.

3.2 Climatic Data

The site, located near Pendleton, Oregon in the southeastern part of the Columbia Basin, is in a region almost entirely surrounded by mountains which have an important influence on the general climate of the region. Under usual atmospheric conditions, air from the Pacific with moderate temperature characteristics typical of the West Coast, move through the Columbia Gorge resulting in mild temperatures. When the flow of air from the west is impeded, temperatures sometimes become quite cold in winter and hot in summer. Below zero readings in the winter and 100 degree days or higher during the summer are not unusual on a few days each year.

Precipitation is seasonal with an average of only 10 percent of the annual rainfall occurring between July and September. It peaks in midsummer, and it is not unusual for several weeks to pass without measurable rainfall. Most precipitation accompanies cyclonic storms moving in from the Pacific Ocean, which reach their greatest intensity and frequency from October through April. The Cascade Range west of the site reduces the amount of precipitation received from these storms. The lighter summertime precipitation usually is the result of thunderstorms which move into the area from the south or southwest. The prevailing wind direction is from the southeast. Southeasterly winds prevail during the late summer and most of the winter, and westerly winds prevail during the spring and early summertime.

Relative humidity ranges from about 30 percent in midafternoon to 50 percent during the early hours of the day in the warmest and driest months. In winter it ranges from 65 percent in midafternoon to around 80 percent or higher early in the morning. Light snow sometimes falls as warm moist air moves in following a quick shot of cold air. It seldom remains on the

ground for more than a few days. Average annual snowfall is about 18 inches. Ice storms also occur a few times a winter when rain falls through cold air moving westward through the Columbia River Gorge.

Annually skies are clear about 28 percent of the time, partly cloudy 25 percent, and cloudy about 47 percent. The percentage of possible sunshine is 80 percent in summer and 25 percent in winter.

Climatological data for the area are summarized in TABLE 3-1. Data were collected at the National Weather Service meteorological station at the Pendleton Municipal Airport. The site is located about 15 miles northwest of the Pendleton Municipal Airport.

CLIMATOLOGICAL DATA FOR PENDLETON, OREGON
TABLE 3-1

Month	Temperature		Precipitation	Wind	
	Average Minimum (°F)	Average Maximum (°F)	Average (Inches)	Average Speed Miles/Hour	Average Direction
January	27.2	39.7	1.51	7.8	SE
February	31.6	46.9	1.14	8.2	SE
March	35.4	54.2	1.16	9.2	W
April	39.4	61.3	1.04	9.9	W
May	45.8	70.0	0.99	9.6	W
June	52.9	79.5	0.64	9.6	W
July	58.0	87.8	0.35	9.0	WNW
August	57.7	86.2	0.53	8.6	SE
September	49.9	76.3	0.59	8.4	SE
October	41.0	63.7	0.86	7.6	SE
November	34.1	48.9	1.58	7.7	SE
December	27.9	40.5	1.63	7.8	SE
Average	41.7	62.9	12.02	8.6	SE

3.3 Geology and Soils

The Cold Springs PBR site is located in the Columbia Plateaus province. The entire site is hilly and is currently used for grazing and irrigated farming.

During the Miocene Epoch, immense outpourings of lava erupted from source vents in Washington, Oregon, and Idaho. Flow after flow of basalts filled a subsiding basin to create

a featureless plateau. This volcanic activity was followed by falling ash and lavas expelled from ancestral cascade volcanoes aligned on the western border of the Deschutes basin. Disrupted and blocked by the lavas, sediment-laden streams carried the material northward, depositing much of the material along the channel filling the broad alluvial plain of the basin. In the Pliocene, waters trapped behind structural ridges formed temporary lakes and ponds that filled with sediment. A broad uplift of the plateau triggered a new erosional phase where rivers carried away much of the unconsolidated clay, silt, and sand and cut deep channels.

Vast lake waters, impounded by glacial ice, impacted the Columbia Plateau during Pleistocene time. Tremendous floods occurred as the ice dams, holding back glacial Lake Missoula and Lake Bonneville broke. Lacustrine silt and alluvium were deposited in the lakes that were formed by debris dams along the Columbia River. After the water receded these deposits were reworked by the wind. The sandy alluvium remained within the Columbia Basin, while the lighter silt was blown over the entire Columbia Plateau (Orr, Orr and Baldwin 1992).

3.3.1 Soils

The soils of the Cold Springs PBR are deep, well-drained soils found on strata terraces of the Columbia River. These soils were formed in eolian sand over lacustrine sediment. The surface layer is pale brown fine sandy silty clay to a depth of 8 in. (20 cm). The subsoil layer consists of light brownish gray, very fine, sandy silty clay. This layer extends to a depth of 28 in. (70 cm). The substratum of the soil is about 31 in. (80 cm) thick and is composed of light brownish gray silty sandy clay. Permeability of the soil is moderately rapid in the upper part and moderate in the lower part. Surface-water runoff is slow and there is only a slight hazard of water erosion. A typical soil profile for this site is shown in Table 3-2.

Table 3-2. Soil Profile

DEPTH (in)	SOIL DESCRIPTION	PERCENTAGE PASSING SIEVE NUMBER #4	#40	#200	PERM. in/hr	AVL. WATER CAP.
0-8	fine sandy silty clay	95-100	90-95	45-60	2.0-6.0	0.18-0.20
8-28	very fine sandy silty clay	95-100	90-95	45-60	2.0-6.0	0.18-0.20
28+	stratified silty sandy clay	95-100	90-95	60-75	0.6-2.0	0.18-0.20

Table modified from Soil Survey of Umatilla County, OR

On the steeper terrace slopes in the site area the soil profile differs. These soils were formed in loess deposits over lacustrine sediments. The slopes can range from 12 to 25%. The surface layer is typically grayish brown very fine sandy silty clay about 2 in. (5 cm) thick. The subsoil layer, to a depth of 18 in. (45 cm), is pale brown, very fine, sandy silty clay. The substratum is composed of light gray and pale brown silty sandy clay to 60 in. (150 cm) (Johnson and Makinson 1988).

3.4 Hydrology

The Cold Springs Bombing Range is drained by Desrain Gulch and several small tributaries, none of which have stream gages.

3.4.1 Ground Water

Ground water in the site area is not easily obtained. The seasonal high water table is below 7 feet (2m); well beneath the surface, year round. There are some apparently large strong aquifers that can be reached but that are very deep, 975 to 1600 feet (300 to 500 m). These deep aquifers are also very discontinuous, therefore, not very predictable as a continuous source of ground water flow.

3.5 Ecology

The information on the endangered and threatened species for this site has been provided by the U.S. Fish and Wildlife Service and the Oregon Natural Heritage Program.

The U.S. Fish and Wildlife Service has indicated that the following Federally protected species may be found in the vicinity of the Cold Springs Bombing Range, Oregon: bald eagle (Haliaeetus leucocephalus), threatened; Ferruginous hawk (Buteo regalis), candidate; loggerhead shrike (Lanius ludovicianus), candidate; Snake River chinook salmon (Oncorhynchus tshawytscha), threatened; Snake River sockeye salmon (Oncorhynchus nerka), endangered; interior redband trout (Oncorhynchus mykiss gibbsi), candidate; Pacific western big-eared bat (Plecotus townsendii townsendii), candidate; Laurence's milk-vetch (Astragalus collinus var. laurentii), candidate; hepatic monkeyflower (Mimulus jungermannioides), candidate; and Columbia cress (Rorippa columbiae), candidate.

The Oregon Natural Heritage Program reported that the following State threatened and endangered species occur in the vicinity of the site: bald eagle, threatened; Ferruginous hawk, special concern; American white pelican (Pelecanus erythrorhynchos), sensitive-vulnerable; and Washington ground squirrel (Spermophilus washingtoni), candidate.

No additional information on the occurrence of rare or endangered species or natural communities is known at this time. This does not mean that other state or federally-listed species may not be present within the areas of interest. An on site inspection by appropriate state and federal personnel may be necessary to verify the presence, absence or location of listed species, or natural communities if remedial action is recommended as part of the final ASR.

3.6 Demographics

3.6.1 Center of Activity

Cold Springs Bombing Range is located near the City of Hermiston, Umatilla County, Oregon. This community has numerous centers of activity such as the Hot Rock State Park.

3.6.2 Population Density:

City:	Hermiston	County:	Umatilla
Area:	5.5 sq.mi.	Area:	3,218 sq.mi.
POP:	10,040	POP:	59,249
PD:	1,825 persons per sq.mi.	PD:	18 persons per sq.mi.

Population and area are based on the U.S. Department of Commerce, Bureau of the Census, 1990 statistics, and telephone interviews.

3.6.3 Business and Industry Profile

A review of both telephone interviews and County Business Patterns (1990) assisted in developing a business profile of the area. The City of Hermiston's largest employers are: J.R. Simplot Potato Processing and Lam Weston Potato Processing. Umatilla County is an economic diverse community. The community supports agriculture, construction, manufacturing, retail, finance and service industries. Following is an industry breakdown, based on a total of 1,391 establishments in Umatilla County: manufacturing, 6.6%; agriculture, 1.4%; service, 30.3%; trade and finance, 42.4%; construction 7%; and other non-agriculture, 12.3%.

3.6.4 Type of Housing

Housing in Hermiston is composed of both single and multi-family homes. There are approximately 4.110 housing units with a median value of $47,800.

3.6.5 New Development in the Area

Development in the Hermiston area includes four new housing developments, U.S. Generating (converter of natural gas to energy), and a water project.

3.6.6 Typical Cross-Section of Population

The percent of those under the age of 18 is 30.6%, over 65 years is 13.1%. The median age is 31.5. The ancestry in Hermiston is diverse. Approximately 81.4% of the population is White, .9% Black, 14.7% Hispanic, 1.1% American Indian or Eskimo, and 1.9% Asian or Pacific Islander.

4.0 HISTORICAL ORDNANCE USAGE

4.1 Historical Site Summary

In December 1941 and January 1942, the Department of the Army (DA) acquired a total of 2,622.08 acres of land for use as a precision bombing range. DA erected a three-tower target on the Cold Springs Precision Bombing Range for target practice. An improvement on the site by DA was the construction of a pumphouse (Corps of Engineers 1993).

A review of historical documentation refers to the site as either the Cold Springs Precision Bombing Range or simply as the Cold Springs Bombing Range. During World War II, several Army airfields with their assigned units used the Cold Springs Precision Bombing Range for day and night training missions. These included Walla Walla Army Air Field (AAF), Washington, and Pendleton Air Field, Oregon. During February 1942, in preparation for use of the Cold Springs Bombing Range, the 6th Army Air Force Bombing and Gunnery Range Squadron stationed at Walla Walla Army Air Field erected three (3) spotting and plotting towers on the site (Walla Walla AAF Historian n.d.).

Military aircraft positioned at the Walla Walla Army Air Field included the B-24 (Bomber) and C-45 (Cargo Aircraft) (Walla AAF Historian 1945).

Historical documentation reveals problems with accidental bomb releases at the Cold Springs Precision Bombing Range. During the month of May 1945, two accidental bomb releases occurred "near the Cold Springs Bombing Range." One of the accidental bomb releases was the result of improperly adjusted bomb rack controls and the exact location of the bombs was not able to be determined (Walla AAF Historian 1945). Historical documents also indicate concern with fires after bombing runs at the Cold Springs Precision Bombing Range. Incidents reported include numerous fires caused by the dropping of M38-A2 practice bombs by units on training missions from Walla Walla Army Air Field during June and July 1944 (Walla Walla AAF Adjutant General 1944).

NEED HEADING

Regarding decontamination of the Cold Springs Precision Bombing Range, a few historical documents provide an indication of efforts made and recommendations given for use of the land. One historical document, dated 18 July 1947, says "Area made safe for civilian use, it is desirable and agreeable with this service that the area be returned to Federal Range status and used for grazing purposes." (Bureau of Land Management 1947). Another historical document, dated 19 November 1947, provides more details with the statement that "The lands have been examined and have been cleared of all explosives or explosive objects reasonably possible to detect by visual inspection." (Corps of Engineers 1947).

By Whom ?

By Whom ?

NEED HEADING

Regarding CWM, the only historical document found notes "a 6 X 6 truck with an M-4 power-driven decontamination unit" used for mobile fire fighting purposes on the Cold Springs Bombing Range (Walla Walla Adjutant General 1944).

In October 1946, the Army declared the property surplus. DA canceled the lease on private property and the DOI received by transfer the public domain land in August 1947. Eventually, all of the land, which encompassed the former Cold Springs Precision Bombing Range, returned to private ownership.

4.2 Review of Historical Records

~~Washington National Records Center~~
National Archives
Suitland Branch
4205 Suitland Road
Suitland, MD 20409

No pertinent information was found.

Washington National Records Center
~~Federal Records Center~~
~~Suitland Branch~~
4205 Suitland Road
Suitland, MD 20409

No pertinent information was found.

National Archives (Archives I)
8th and Pennsylvania
Washington, D.C. 20408

No pertinent information was found.

Archives II
8601 Adelphi Road
College Park, MD 20740-6001

No pertinent information was found.

Chemical and Biological Defense ~~Agency~~ Historical Office
AMSCB-CIH
Aberdeen Proving Ground
Edgewood, MD 21010

No pertinent information was found.

What is accession? This is LOCATION

National Personnel Records Center
9700 Page Blvd MILITARY PERSONNEL RECORDS
St. Louis, MO 63132

RG 18, Series 08-17-23-9-3, Box 14, Folder 684 (General Correspondence). Information on fires and type of ordnance used at the Cold Springs Bombing Range was found.

U.S. Army Chemical School
Fisher Library, Sibert Hall
Ft. McClellan, AL 36205-5020

A letter requesting information on the site was sent, but no information was received.

Air Force Historical Research Agency
Headquarters, AFHRA/ISR (Archives Branch)
Maxwell Air Force Base, AL 36112-6424

Specific information regarding training missions, operations and incidents at the Cold Springs Bombing Range was obtained under the histories of Walla Walla Army Air Field, WA, and Pendleton Field, OR.

National Archives--Pacific Northwest Region
6125 Sand Point Way NE
Seattle, WA 98115

General correspondence regarding the surplus of the site was found.

Federal Records Center--Seattle
6125 Sand Point Way NE
Seattle, WA 98115

No pertinent information was found.

United States Army Corps of Engineers--Seattle District
4735 E. Marginal Way
Seattle, WA 98124-2255

Historical maps, correspondence and data sheets on acquisition and disposal, ownership data sheets, and correspondence pertaining to range clearance were found.

Whitman College
Penrose Memorial Library
Northwest & Whitman College Archives
Walla Walla, WA 99362

No pertinent information was found.

The Hermiston Herald
193 E. Main Street
Hermiston, OR 97838

No pertinent information was found.

Umatilla County Historical Society & Museum
108 S.W. Frazer
Pendleton, OR 97801

No pertinent information was found.

Umatilla County Soil & Water Conservation District
1229 S.E. Third
Pendleton, OR 97801

A copy of the latest edition of the District's Environmental Assessment for Umatilla County was obtained.

Pendleton Public Library
214 N. Main
Pendleton, OR 97801

No pertinent information was found.

4.3 Summary of Interviews

Interviews were conducted by telephone and in person, both prior to and during the site inspection. The primary purpose of these interviews was to make initial contact with individuals knowledgeable of the site and to coordinate follow-up visits during the site inspection phase of this ASR's preparation. A list of persons interviewed is included at Appendix H. Any pertinent information derived from these discussions is covered within the context of this report.

4.4 Interpretation of Aerial Photography

4.3.1 Photo Analysis

Photo analysis and land-use interpretation were performed using the following photographic sources:

Photo Date	Approx. Scale	Source	Frame ID #s
30 Oct 49	1:20,000	ASCS	3F 159, 158
27 Jun 50	1:20,000	ASCS	9F 49, 50

Photo Date	Approx. Scale	Source	Frame ID #s
18 Aug 56	1:20,000	ASCS	1P 131, 132
25 Jul 64	1:20,000	ASCS	8EE 53, 54
22 May 71	1:20,000	ASCS	3MM 168, 169

Aerial photography for this site was referenced using USGS 7.5' topographic quadrangles. The quadrangle used is Stanfield SE, Oregon, 1993.

The 1949 photography has a large and very distinct bullseye target with three rings. Radiating out from the middle ring are four straight lines, at 90 degree angles to each other. There are two tick marks on each line; these are marked at equal distances along the straight lines. Outside of the circles and in the north east quadrant is a marking of an arabic number 4. There are black dots in the area; these appear to be wells. Some are within the circles and some are just outside the circles. There do not seem to be any craters in the vicinity of the site.

About 1,250 feet south of the bullseye target is a very small squatty target or marker. It has an elliptical outer ring with a white center. The elliptical shape is oriented in an east-west direction. From the center are two lines, ninety degrees to each other and radiating to the outer circle.

The 1950 photography is taken less than a year from the 1949 pictures. There are no changes in the site by this date.

The photographs in 1956 show everything being visible but beginning to fade. The smaller target is still visible. There is a very straight line feature that was built over a portion of the bullseye target. This could be a road or power line, the latter is probably not true because it is not a feature on the topographic map. The landing strip that is on the topographic map does not show up on the photographs at this date.

The 1964 photographs show the large target very faded and almost non detectable. The smaller target is reduced to just a few white dots. By knowing where it once was, the outline could be detected. The long linear feature that was near the large target is faded. The pipeline which was a feature on the topographic map could be detected on this date photography.

By the 1971 photography the larger target can still be detected but is faded even more. There is more agriculture in the area and the roads are much better than in the earlier years. The linear feature near the large target has faded but is still there. The smaller target is hardly recognizable even with knowing its previously location. The landing strip to the north on the topographic map, is still not showing on the 1971 photography.

6.3.2 Map Analysis

The Rand McNally 1994 road atlas and the following USGS 7.5' topographic quadrangles were used in analysis of the site: Stanfield, Oregon, 1993.

The general geographic coordinates of the site are:

36° 14' 00" N Latitude
95° 17' 30" W Longitude

The Cold Springs Bombing Range is located in the north-central most portion of Oregon. It is about ten miles from the state of Washington. The town of Hermiston located nine miles west. The towns around the site are very sparse and small nature.

This area is semi-arid grazing land. The entire bombing range was hilly with a lot of 4-wheel drive tracks are in the area. According to the INPR, the area has gone back to private ownership and is being irrigated and farmed. There is a small landing strip north of the site, with a NE-SW orientation, which was not present on the 1962 quadrangle. West of the site is an underground pipeline. South of the site is another very small landing strip which is almost an east-west orientation. In that same general location is Despain Road and a substation. East of the landing strip there are also approximately five large buildings to the southeast of the site. They are east of the second mentioned landing strip.

The site is serviced by two major interstates (82 and 84) and only a few hard surface roads, mostly the 4-wheel drive tracks. The Columbia River, which feeds directly into the Pacific Ocean, comes into Oregon along the border at the location of the site. The Snake River is a tributary to the Columbia. North and west of the site location is the Cold Springs Canyon with a reservoir. South of the site is the Despain Gulch, a small tributary which feeds the Umatilla River.

5.0 Real Estate

5.1 Confirmed DOD Ownership

Based on data contained in the FDE, the site was acquired by transfer of public domain lands and lease from private parties between December 1941 and January 1942. The former Cold Springs range site was disposed of in August 1947. Former public domain lands totalling 310.36 acres were returned to the Department of Interior and the remaining 2,311.72 acres sold to private parties.

None of the real estate documents examined contained ordnance and explosive waste related land use restrictions.

While no actual certificates of clearance were found, a 19 November 1947 letter to the Department of the Interior stated that the lands had been examined and cleared. A copy of this letter is located in Appendix E-1.

5.2 Potential DOD Ownership

No additional lands were identified as being DOD owned or controlled.

5.3 Historically Significant Past Ownership

There is nothing in the records to indicate that there were any historically significant past ownerships, other than DOD's, with respect to possible OEW or CWM contamination.

5.4 Present Ownership

The Findings and Determinations of Eligibility (FDE), cited in Paragraph 2.0, indicates that two landowners currently hold the lands in private ownership (Mikami Farms and Royale Columbia Farms). Our research indicates that the land attributed to Royale Columbia Farms in the INPR is owned by Mr. Randy Dorran, and leased to Walchli Farms.

6.0 Site Inspection

On 17 May 1995 the following personnel from the St. Louis District conducted the site visit:

Dennis W. Gilmore	Project Manager
Randy Fraser	Safety Specialist
Fred Miller	Historian
C. John Daly	Historian

The team met with Mr. John Walchli, long time resident of the area and current leasee of approximately one-fourth of the FUDS. Mr. Walchli informed us of the numerous OEW recoveries he has made. Of note was a live 37mm, point detonating round which he unearthed about twenty years ago. The round, which he has maintained on display, appeared to have not been fired. We strongly recommended that he contact local authorities and dispose of the UXO. Other items encountered by him were described as sand or flour filled bombs, approximately 8-10 inches in diameter. The vast majority of all items were found in irrigation circle #22.

Mr. Walchli informed us that he buried a large quantity of the practice bombs in the eastern portion of circle #22. The 37mm round was buried in an area he believes to now be within circle #20.

We later met with Harold Nakamo, representative of Makami Farms. Makami owns the remaining lands of the former bombing range. They also have encountered numerous practice bombs. Harold identified the area having the greatest concentration of OEW as half circle #16. This area is due south of, and adjacent to, Walchli's circle #22. There were three remnants of practice bombs observed outside of Makami's office.

Based on our previous research and the areas identified by the landowners, our site inspection focused on the undisturbed areas and the canyon in the vicinity of the irrigated tracts #22 and #16. Aerial photography shows that the bombing target was situated at this location. The hill on which the target was located drops off into a small canyon on three sides.

The northern and southern slopes of the hill were found to be littered with non-explosive OEW in the form of 100 lb practice bombs. Examination of those items which remained relatively intact revealed that they were filled with sand and gravel.

Other than the 37mm round presented by Mr. Walchli, no OEW of an explosive nature was observed.

7.0 Evaluation of Ordnance Presence

Based on the extensive archive searches performed, the interviews with the owners of major portions of this DERP-FUDS site, and the results of the site investigation, there exists the probability of OEW contamination at the site. The remains of 100 pound air dropped practice bombs were found throughout the target area. Additionally, a nonstandard configured 37mm artillery round was previously recovered on the site.

As noted in Section 6.0 - Site Inspection, the site is contaminated with nonhazardous OEW. A potential hazard exists in the form of spotting charges typically associated with these practice bombs. The bombing target was located in what is currently Makami's circle #16. As predictable, the concentration of OEW has been historically found in this circle and circle #22 of Walchli's Farms.

Approximately 20 years ago, a 37mm, point detonating artillery round was unearth by John Walchi in the vicinity of circle #20. Markings on the projectile body identified it as a M55A1 practice round. However, the fuze was an M56, which is high explosive and point-detonating. This is not the standard configuration of projectile body and fuze. The rotating band was not engraved, indicating that this round had not been fired. The origins of this item is unknown. Research indicates that the 37mm round was fired from the P-39 aircraft, which was flown out of the airfields associated with this range.

Photographs are provided at Appendix I.

8.0 Technical Data of Ordnance and Explosives

8.1 Ordnance Related Mission

For the duration of its existence, Cold Spring Precision Bombing Range was used for practice bombing using the M38A2, practice bombs. Numerous M38A2 remains littered the northern and southern slopes. No intact spotting charges were found.

There is no historical evidence that this range was ever used for gunnery practice. However, a 37mm projectile was recovered by a local resident from the immediate area of the range. The item was an unfired 37mm practice projectile with a point detonating fuze.

8.2 Description of Ordnance

The M38A2, 100 lb Practice Bomb is a sand filled bomb which uses either the M1A1, M3 or M4 spotting charge. The bomb simulates a General Purpose (GP) bomb of the same size.

The M1A1, Spotting Charge fits in the after end of the 100-pound practice bomb M38A2. It produces a flash of flame and white smoke for observation of bombing accuracy. The fuze is an integral part of the spotting charge. M1A1 contains 3 pounds of black powder.

The M3, Spotting Charge, is ⅝ inch longer than the M1A1, but otherwise similar. The M3 has a dark smoke filler, which is adapted for bombing practice over snow-covered terrain.

The M4, Spotting Charge, consists of a glass bottle filled with 14.4 ounces of an FS smoke mixture. The bottle ruptures upon impact.

Projectile, Practice, M55A1 w/Tracer and Fuze, PD, M56. The M55A1 was designed to simulate the M54, HE projectile for practice and should utilize an M50 dummy fuze. However, in this case the M56, PD fuze was used, which is a normal indication of a high explosive round. The round was found without a cartridge case and the rotating bands were not scored, indicating it to be unfired.

Drawings and additional descriptions of the ordnance are located in Appendix C.

9.0 Evaluation of Other Site Information

There were no other environmental issues related to the Cold Springs Precision Bombing Range Reservation.

APPENDIX A

REFERENCES

ORDNANCE AND EXPLOSIVE WASTE
CHEMICAL WARFARE MATERIALS
ARCHIVES SEARCH REPORT
FINDINGS
for the former
COLD SPRINGS PRECISION BOMBING RANGE
Umatilla County, Oregon

Project Number F10OR017201

APPENDIX A -- REFERENCES

A1. INPR REFRENCES

U.S. Army Corps of Engineers

1993 Inventory Project Report (INPR), for Site No. F100R017200, Cold Springs Precision Bombing Range Military Reservation. U.S. Army Corps of Engineers, Portland, OR.

A.2. REFERENCES

Adjutant General

1944 Military Letter from the Adjutant General, Walla Walla Army Air Field, to the Commanding General, Fourth Air Force, dated 13 October 1944, Subject: Fire Prevention Measures at Bombing and Gunnery Ranges. RG 18, Series 08-17-23-9-3, Box 4, Folder 684 (General). National Personnel Records Center, St. Louis, MO.
MILITARY PERSONNEL RECORDS

Bureau of Land Management

1947 Letter from Regional Grazier, Bureau of Land Management (BLM), Department of the Interior (DOI), Swan Island Station Portland, OR, to Division Engineer, War Department, Corps of Engineers, Portland, OR, 18 July 1947, regarding Cold Springs Bombing Range. U.S. Army Corps of Engineers, Seattle, WA.

Corps of Engineers

1947 Letter from Assistant Chief of Engineers for Real Estate, Portland, OR, to Director, BLM, DOI, Washington, D.C., dated 19 November 1947, regarding Cold Springs Bombing Range. U.S. Army Corps of Engineers, Seattle, WA.

Corps of Engineers
1993 Military Memorandum from Commanding General, North Pacific Division, Corps of Engineers, to Commander, USAED, Huntsville Division, Corps of Engineers, dated 1 October 1993, Subject: Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS), Inventory Project Report (INPR), for Site No. F100R017200, Cold Springs Precision Bombing Range Military Reservation. U.S. Army Corps of Engineers, Portland, OR.

Walla Walla AAF Historian
1945 Military Manuscript, History of the Walla Walla Army Air Field, 1 May to 31 May 1945, prepared by the Historian of 423rd Army Air Force Base Unit (H), Walla Walla AAF, for Headquarters, Fourth Air Force, June 1945. Air Force Historical Research Agency, Maxwell AFB, AL.

Walla Walla AAF Historian
n.d. Military Manuscript, Organization History, Bombing and Gunnery Range Detachment, Pendleton Field, 1941-1942, prepared by Historian, 6th AAF Bombing and Gunnery Range Squadron, Walla Walla Army Air Base. Air Force Historical Research Agency, Maxwell AFB, AL.

A.3 REFERENCES FOR GEOLOGY AND SOILS

Johnson, David R. and Makinson, Allen J.
1988 *Soil Survey of Umatilla County Area, Oregon.* US Department of Agriculture, Soil Conservation Service, in cooperation with US Department of the Interior, Bureau of Indian Affairs, and Oregon Agricultural Experiment Station.

Orr, Elizabeth L., Orr, William N., and Baldwin, Ewart M.
1992 *Geology of Oregon.* Kendall/Hunt Publishing Company, Dubuque, IA.

A.4 DEMOGRAPHIC REFERENCES

Hermiston Chamber of Commerce (503-567-6151)
U.S. Department of Commerce. Bureau of the Census. Oregon 1990.

APPENDIX B

GLOSSARY AND ACRONYMS

ORDNANCE AND EXPLOSIVE WASTE
CHEMICAL WARFARE MATERIALS
ARCHIVES SEARCH REPORT
FINDINGS
for the former
COLD SPRINGS PRECISION BOMBING RANGE
Umatilla County, Oregon

Project Number F10OR017201

APPENDIX B -- GLOSSARY AND ACRONYMS

AAF	Army Air Field
AA	Anti-Aircraft
AGO	Adjutant General's Office
AP	Armor Piercing
APDS	Armor Piercing Discarding Sabot
APERS	Antipersonnel
APT	Armor Piercing with Tracer
ASR	Archives Search Report
Aux	Auxiliary
BAR	Browning Automatic Rifle
BD	Base Detonating
BD/DR	Building Demolition/Debris Removal
BE	Base Ejection
BGR	Bombing and Gunnery Range
BLM	Bureau of Land Management
BRAC	Base Realignment And Closure
CADD	Computer-Aided Design/Drafting
Cal	Caliber
CBDA	Chemical and Biological Defense Agency
CBDCOM	Chemical and Biological Defense Command
CE	Corps of Engineers
CEHND	Corps of Engineers, Huntsville Division
CELMS	Corps of Engineers, St. Louis
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
cfs	Cubic Feet Per Second
COE	Chief of Engineers
COMP	Composition
CTG	Cartridge
CSM	Chemical Surety Material
CSM	Command Sergeant Major
CWM	Chemical Warfare Material
CWS	Chemical Warfare Service
DA	Department of the Army
DARCOM	Development and Readiness Command
DERA	Defense Environmental Restoration Account

DERP	Defense Environmental Restoration Program
DERP-FUDS	Defense Environmental Restoration Program-Formerly Used Defense Sites
DoD	Department of Defense
DOE	Department of Energy
DOI	Department of Interior
EE/CA	Engineering Evaluation/Cost Analysis
EIS	Environmental Impact Statement
EOD	Explosives Ordnance Disposal
EPA	Environmental Protection Agency
ERDA	Environmental Restoration Defense Account
ERTC	Engineer Replacement Training Center
FDE	Findings and Determination of Eligibility
FFMC	Federal Farm Mortgage Corporation
FLCH	Flechette
FS	Feasibility Study
FWS	U. S. Fish and Wildlife Service
FUDS	Formerly Used Defense Sites
GIS	Graphic Information System
GSA	General Services Administration
HE	High Explosive
HEAT	High Explosive Anti-Tank
HEI	High Explosive Incendiary
HEP	Plastic
HE-S	Illuminating
HTRW	Hazardous Toxic and Radioactive Waste
HTW	Hazardous and Toxic Waste
IAS	Initial Assessment Study
INPR	Inventory Project Report
IRP	Installation Restoration Program
MCX	Mandatory Center of Expertise
MG	Machine Gun
MG	Major General
mm	Millimeter
MT	Mechanical Time
MTSQ	Mechanical Time Super Quick
NARA	National Archives and Records Administration
NAS	Naval Air Station
NCDC	National Climatic Data Center
NCP	National Contingency Plan
NFS	National Forest Service
NG	National Guard
NGVD	National Geodetic Vertical Datum
NOAA	National Oceanic and Atmospheric Administration
NOFA	No Further Action
NPRC	National Personnel Records Center
NRC	National Records Center
NWMA	Northwest Maneuver Area
OEW	Ordnance and Explosive Waste
OSHA	Occupational Safety and Health Act
PA	Preliminary Assessment
PBR	Precision Bombing Range
PD	Point Detonating

PIBD	Point Initiating, Base Detonating
PL	Public Law
QASAS	Quality Assurance Specialist Ammunition Surveillance
RA	Removal Action
RAC	Risk Assessment Code
RD	Remedial Design
RG	Record Group
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasability Study
SARA	Superfund Amendments and Reauthorization Act
SCS	Soil Conservation Service
SLD	St. Louis District, Corps of Engineers
SSHO	Site Safety and Health Officer
SSHP	Site Safety and Health Plan
SWMU	Solid Waste Management Units
TECOM	Test Evaluation Command
TEU	Technical Escort Unit
TNT	Trinitrotoluene
TP	Target Practice
USA	United States of America
USACE	U.S. Army Corps of Engineers
USADACS	U.S. Army Defense Ammunition Center and School
USAED	U.S. Army Engineer District
USAEDH	U.S. Army Engineer Division, Huntsville, AL
USATHMA	U.S. Army, Corps of Engineers, Toxic and Hazardous Materials Agency
USC	United States Code
USDA	U.S. Department of Army
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UXO	Unexploded Ordnance
WAA	War Assets Administration
WD	War Department
WNRC	Washington National Records Center

APPENDIX C

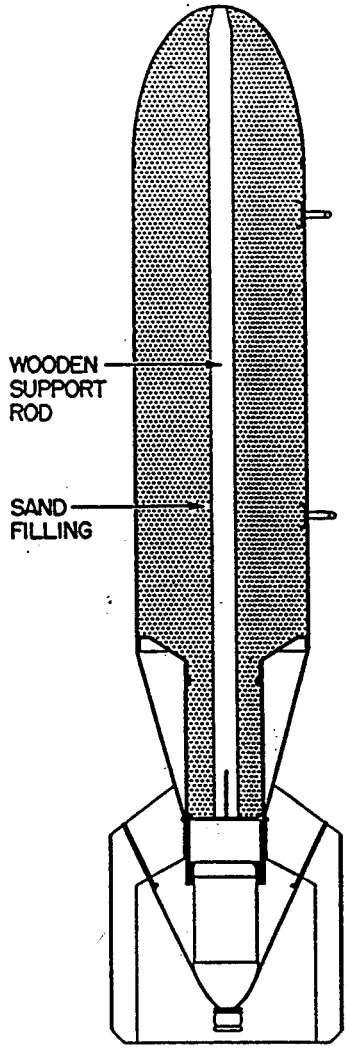
TEXT / MANUALS

ORDNANCE AND EXPLOSIVE WASTE
CHEMICAL WARFARE MATERIALS
ARCHIVES SEARCH REPORT
FINDINGS
for the former
COLD SPRINGS PRECISION BOMBING RANGE
Umatilla County, Oregon

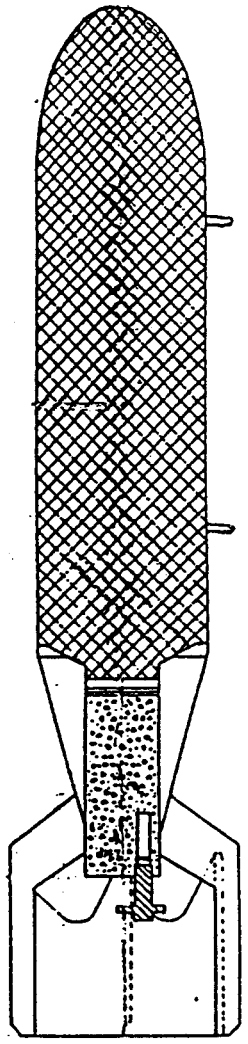
Project Number F10OR017201

APPENDIX C -- TEXT/MANUALS

BOMB, PRACTICE, 100 POUND, M38A2



With M4 spotting charge



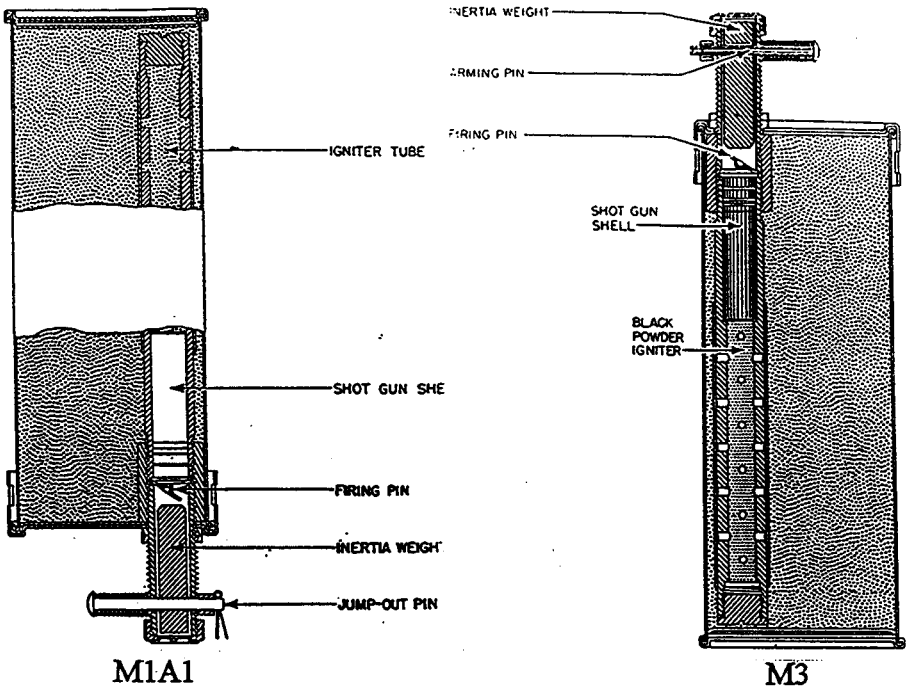
With M3 spotting charge

Description: This bomb simulates a General Purpose (GP) bomb of the same size. The bomb is constructed of light sheet metal with the box type fins welded to the bomb body. The spotting charge is assembled in a sleeve at the base of the bomb, within the fin box. Authorized spotting charges are the M1A1, M3, and M4. When using the M4 spotting charge a wooden support rod is installed in the bomb. The bombs are sand filled.

Over-all length	47.5 inches
Diameter	8.13 inches
Weight empty	15.7 pounds
Weight sand loaded & spotting charge	100 pounds

Reference	OP 1664, Feb 54
	Complete Round Chart #5981, Oct 44

SPOTTING CHARGE, M1A1, M3



M1A1 M3

Description: The M1A1 fits in the after end of the 100-pound Practice Bomb M38A2. It produces a flash of flame and white smoke for observation of bombing accuracy. When assembled in the bomb, the can of the charge protrudes two to three inches out of the bomb body. The fuze is an integral part of the spotting charge assembly. On impact, the inertia weigh drives the firing pin into the shotgun-type primer, which, in turn, ignites the black powder.

M3 spotting charge has a 2⅓ pound dark smoke filler and a black powder igniter. It is ⅝ inch longer than the M1A1, but otherwise is like it. The M3, with its dark smoke filler, is well adapted for bombing practice over snow-covered terrain. The black powder igniter charge contains approximately 425 grains.

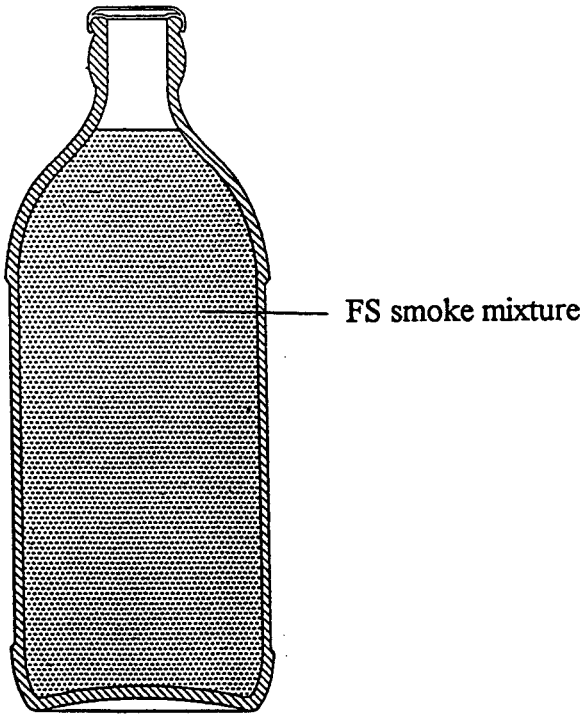
Over-all length
- M1A1 ..... 11.18 inches
- M3 ..... 11.71 inches

Diameter ..... 3.43 inches
Weight ..... 4.25 pounds
Filler
- M1A1 ..... Black Powder Charge, 3.0 pounds
- M3 ..... Black Smoke Mixture, 2.33 pounds

Fuze ..... Integral, inertia-type

Reference ..... OP 1664, Feb 54

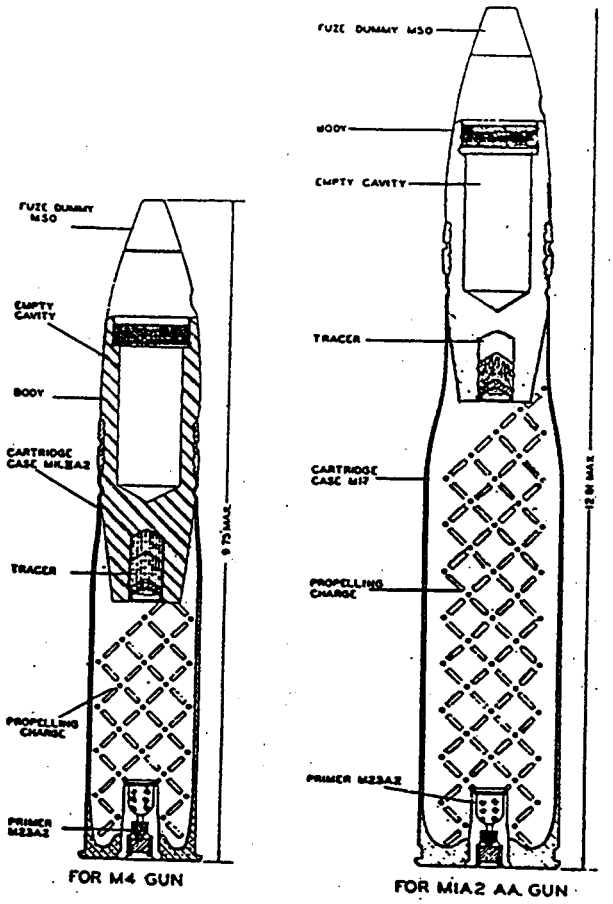
SPOTTING CHARGE, M4



Description: The Spotting Charge M4 consists of a glass bottle filled with FS smoke mixture. An ordinary bottle cap seals the mixture. The bottle is held to the Practice Bomb M38A2 by a wire twisted around the neck of the bottle and attached to the tail vanes. The charge assembly weighs 2.54 pounds

Over-all length	7.37
Diameter	2.95 inches
Material	Glass
Weight	2.54 pounds
Filler	FS smoke
Filler weight	14.4 ounces
Fuze	Integral, inertia-type
Reference	OP 1664, Feb 54

PROJECTILE, 37 mm PRACTICE w/TRACER, M55A1



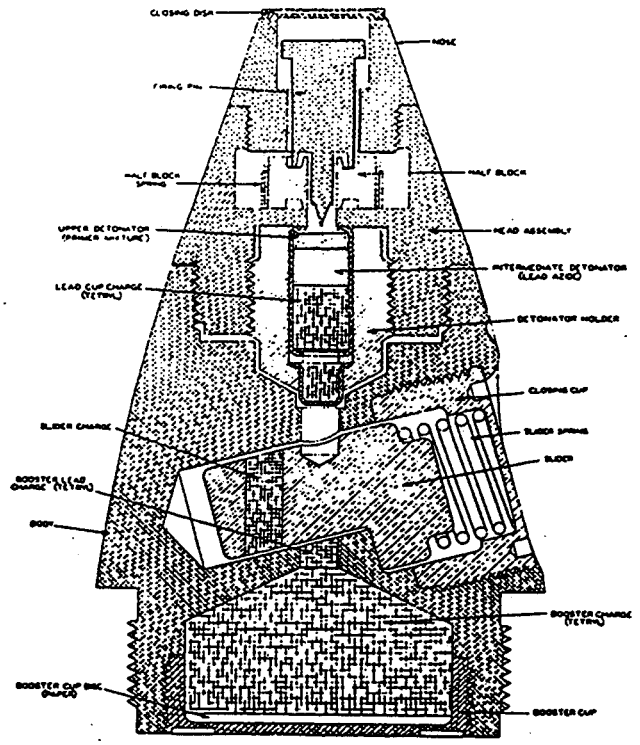
Use: M4 Gun and M1A2 AA Gun

Description: The Projectile M55A1 is made up of three parts. The body has no filler, but is made to the same size and weight as the high explosive M54. A tracer cavity is machined into the base. The tracer consists of red tracer composition and igniting compound closed into the tracer cavity. The fuze, dummy, M50, is entirely inert and is made in one piece aluminum. It is of the same size, shape, and weight as the M56 Fuze. Aside from the blue painting and white stenciling on the projectile, it may be distinguished as the Practice Round M55A1 by the Dummy Fuze M50. Over-all length depends on the cartridge case used.

Length (projectile) ..... 5.9 inches
Over-all length w/cartridge case ..... 9.75 or 12.81 inches
Diameter ..... 37 mm
Weight ..... 1.34 pounds
Filler ..... None
Fuze ..... M50 Dummy Fuze

Reference ..... TM 9-1904

FUZE, P.D., M56



Description: The M56 Fuze is a point detonating impact fuze used on the 37mm high explosive projectile. Since the High-explosive Round M54 is required to function on impact with light materials such as those used in planes, a supersensitive fuze is needed. A super-sensitive fuze is one which will detonate on very slight impact such as with a double thickness of airplane fabric. The M56 is both supersensitive and superquick because the firing pin is protected only by a very thin aluminum closing cup and rests, at the time of impact, right on the detonator which initiates an almost uninterrupted train of detonating explosives. The body of the fuze is divided into three parts; the body loading assembly, the head assembly, and cap. The booster of trtryl is pressed into a cavity in the lower part of the body. The complete round of M54, H.E. Shell can be identified by the presence of the M56 Fuze.

Reference ..... TM 9-1904

APPENDIX D

REPORTS / STUDIES

ORDNANCE AND EXPLOSIVE WASTE
CHEMICAL WARFARE MATERIALS
ARCHIVES SEARCH REPORT
FINDINGS
for the former
COLD SPRINGS PRECISION BOMBING RANGE
Umatilla County, Oregon

Project Number F10OR017201

APPENDIX D -- REPORTS/STUDIES

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

CEMP-RF (200-1a)

21 DEC 1993

MEMORANDUM FOR

COMMANDER, NORTH PACIFIC DIVISION, ATTN: CENPD-PM
COMMANDER, HUNTSVILLE DIVISION, ATTN: CEHND-PM

SUBJECT: Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS) Inventory Project Report (INPR) - Cold Springs Precision Bombing Range Military Reservation, Umatilla County, Oregon, Site No. F10OR017200, Project No. F10AK017201 (OEW).

1. Reference:

a. Engineer Regulation, ER 5-7-1(FR), 30 Sep 92, Subject: Project Management.

b. Memorandum, CEMP-RF, 16 Nov 92, Subject: Implementation of Project Management for the Defense Environmental Restoration Program for Formerly Used Defense Sites(DERP-FUDS).

c. Memorandum, CENPD-PM-MP, 01 Oct 93, SAB.

d. Memorandum, CEHND-ED-SY, 08 Dec 93, subject: DERP-FUDS INPRs Requiring an Ordnance and Explosive Waste (OEW) Engineering Evaluation/Cost Analysis (EE/CA).

2. This memorandum authorizes an OEW project (Project No. F10OR017201) described in the INPR for the subject site. The first phase of this project will be a phased EE/CA study as recommended in Ref 1d.

3. CENPD will assign the Project Manager (PM) for this site IAW Ref 1a & 1b. This memorandum assigns Technical Management responsibility for execution of the subject OEW project through Removal Design to CEHND. The assigned Technical Manager (TM) will provide technical support for all phases of the subject project. If required, CENPP will execute Removal Action.

4. Request that CENPD, CEHND, and CENPP ensure that the subject project number appears on all OEW project specific documentation.

DEPARTMENT OF THE ARMY
NORTH PACIFIC DIVISION, CORPS OF ENGINEERS
P.O. BOX 2870
PORTLAND, OREGON 97208-2870

Reply to
Attention of:

CEN. D-PM-MP (200-1a)

01 OCT 1993

MEMORANDUM FOR CDR, USAED, HUNTSVILLE DIVISION (CEHND-PM-E),
P.O. BOX 1600, HUNTSVILLE, AL 35807-4301

SUBJECT: Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS); Inventory Project Report (INPR), for Site No. F10OR017200, Cold Springs Precision Bombing Range Military Reservation

1. I am forwarding the subject INPR for your review. The site is determined to be a formerly-used defense site. The proposed project is eligible for DERP-FUDS.

2. I recommend that CEHND:

a. Determine the need for further study and take necessary actions.

b. File this INPR.

3. The CENPD-PM-MP POC for this action is Mr. Moon-Yong Han, P.E., (503) 326-7361.

ERNEST J. HARRELL
Major General, USA
Commanding

Encl
Memo, CENPP-PE-DC
13 Sep 93

CF (w/encl):
CEMP-RF (w/encl)
CENPP-PM (w/o encl)
CENPP-PE-DC (w/o encl)

DEPARTMENT OF THE ARMY
PORTLAND DISTRICT, CORPS OF ENGINEERS
P. O. BOX 2946
PORTLAND, OREGON 97208-2946

Reply to
Attention of:

CENPP-PE-DC (200-1a)

13 SEP 1993

MEMORANDUM FOR Commander, North Pacific Division,
ATTN: CENPD-PM-MP

SUBJECT: Defense Environmental Restoration Program - Formerly Used Defense Sites (DERP-FUDS) Inventory Project Report (INPR) for Site No. F10OR017200, Cold Springs Precision Bombing Range Military Reservation

1. The subject INPR covers the DERP-FUDS Preliminary Assessment (PA) of the Cold Springs Precision Bombing Range Military Reservation, Oregon. A site visit was conducted on 3 May 1993. The site survey summary sheet and site maps are enclosed (encl 1).

2. This INPR has been reviewed and concurred by the Portland District Office of Counsel.

3. We have determined that the site was formerly used by the Army. A recommended Findings and Determination of Eligibility is enclosed (encl 2).

4. Hazardous wastes may be present at the site. The category of hazardous waste which is eligible for cleanup under DERP-FUDS is Ordnance and Explosive Waste (OEW). The Project Summary Sheet and the Risk Assessment Code (RAC) are enclosed (encl 3). Available source material is enclosed (encl 4).

5. Recommendation:

a. Approve and sign the Findings and Determination of Eligibility.

b. Forward a copy of this INPR to CEHND for the PA file and for a determination of the need for further study at the subject gunnery range.

6. Portland District point of contact for this project is Michael Gross, (503) 326-6489.

Charles A.W. Hines

CHARLES A.W. HINES
Colonel, Corps of Engineers
Commanding

4 Encls
as

SITE SURVEY SUMMARY SHEET
FOR
DERP-FUDS SITE NO. F10OR017200
COLD SPRINGS PRECISION BOMBING RANGE MILITARY RESERVATION
3 MAY 93

SITE NAME: Cold Springs Precision Bombing Range Military Reservation

LOCATION: Umatilla County, Oregon, approximately 9 miles east of the City of Hermiston, Oregon.

SITE HISTORY: In December 1941 and January 1942, 2,622.08 acres of land were acquired by the Army by transfer from the Department of the Interior (public domain land--310.36 acres) and lease from a private party (2,311.72 acres), for use as a precision bombing range. Records show that a three-tower target and a pumphouse and well were constructed on this site. In October 1946 the Army declared the property as surplus. The lease was cancelled and the public domain land was retransferred to the Department of the Interior in August 1947. All of the land was subsequently sold to other private parties. Currently, two private parties own the land. On one portion of the land (Mikami Farms), the owners have plowed up bomb fragments. On the other portion of the land (Royale Columbia Farms), there was no evidence of bomb debris.

SITE VISIT: On 3 May 1993, Jerry Gardenhire and John Lake, CENPP-PE-DC, visited the site with a representative of Mikami Farms and Steve Fritz of Royale Columbia Farms. Prior to the site visit, Mr. Sach Mikami of Mikami Farms and Mr. Walt McDevitt of Royale Columbia Farms were interviewed over the telephone, concerning their ownership of the property and its history.

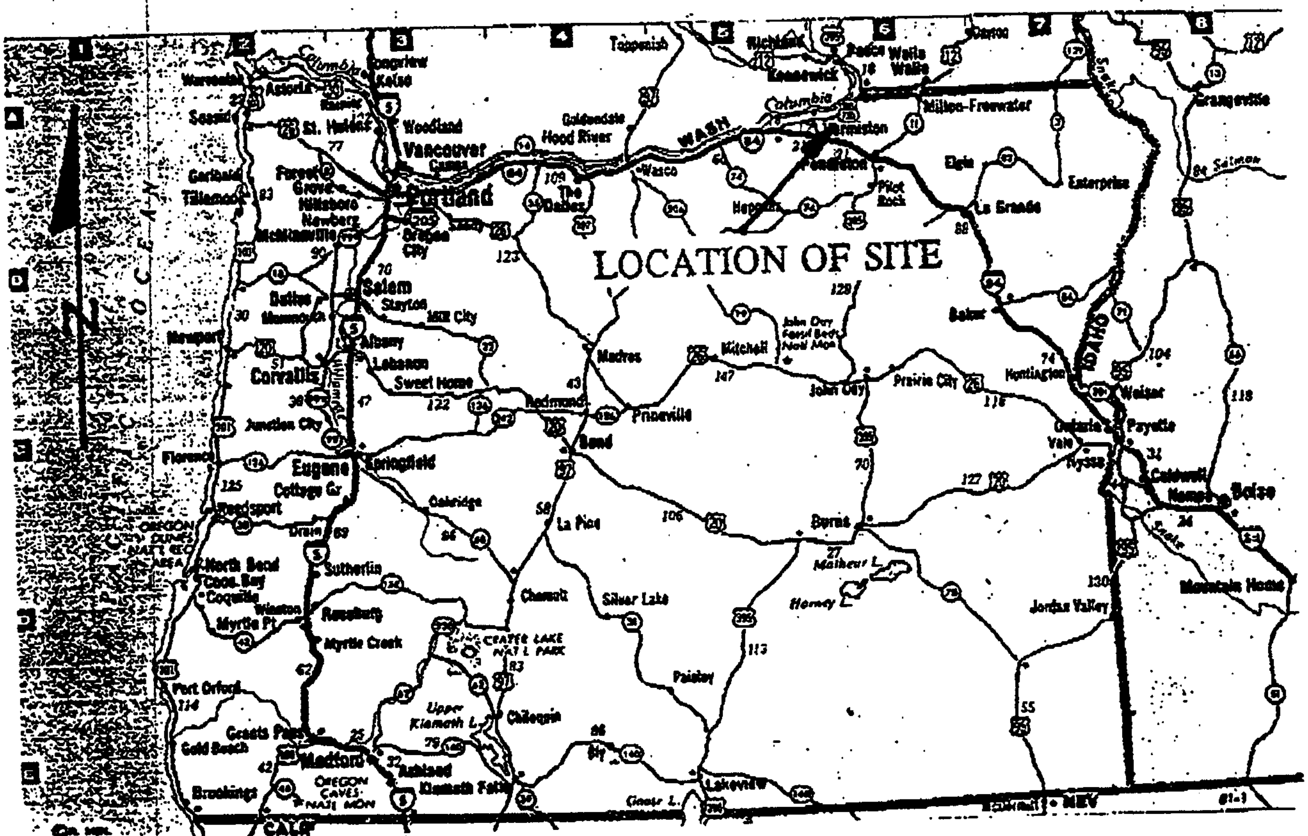
CATEGORY OF HAZARD: OEW.

PROJECT DESCRIPTION: There is one potential project at the site.

a. OEW. The site is a former precision bombing range. Hazardous waste may be present at the site.

PA POC: Michael Gross, CENPP-PE-DC, (503) 326-6489.

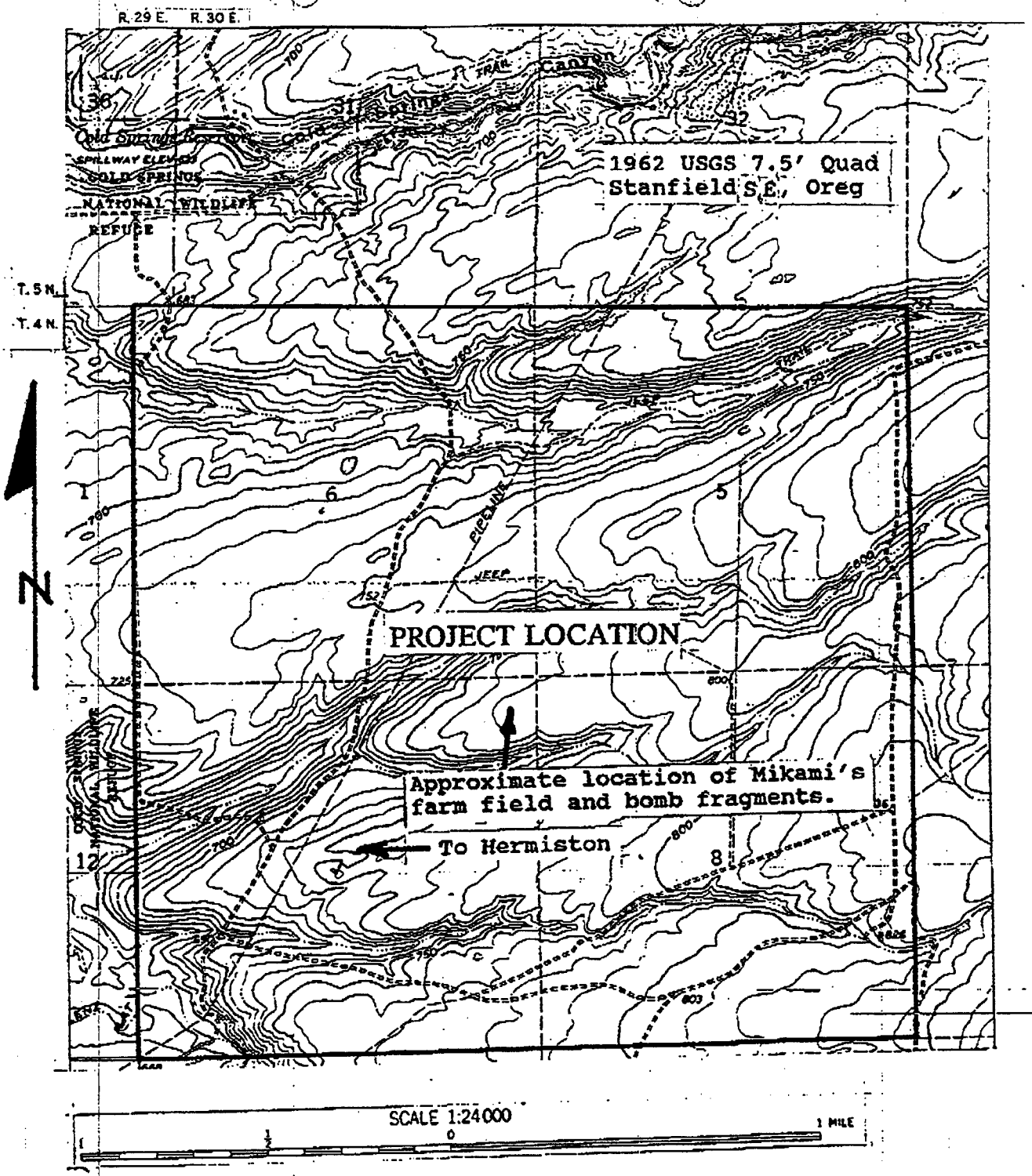
Encl 1



VICINITY MAP

SCALE IN MILES

Cold Springs Precision
Bombing Range
F10OR017200



Cold Springs Precision Bombing Range
F10OR017200

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FORMERLY USED DEFENSE SITES
FINDINGS AND DETERMINATION OF ELIGIBILITY

COLD SPRINGS PRECISION BOMBING RANGE
MILITARY RESERVATION, OREGON

SITE NUMBER F10OR017200

FINDINGS OF FACT

1. The War Department acquired 310.36 acres of public domain and 2,311.72 acres of lease lands for the Cold Springs Precision Bombing Range. Executive Order No. 9042 dated January 26, 1942 withdrew 310.36 acres of public domain lands for use by the War Department. The lease information is incomplete. However, the lease document number is W698-eng-1910. The total area acquired is 2,622.08 acres.

2. The improvements constructed at the site were used in connection with the Cold Springs Precision Bombing Range. The site was determined to be under DOD control during the period of DOD jurisdiction and use.

3. The War Department declared the site excess to their needs on October 2, 1946. The 2,311.72 acre lease was cancelled on August 16, 1947. The Corps of Engineers relinquished the withdrawn lands to the Department of the Interior by letter dated November 19, 1947. Public Land Order No. 477 dated April 30, 1948 partially revoked Executive Order No. 9042 as it applied to the 310.36 acres and retransferred the lands to the Department of the Interior. The total area excessed is 2,622.08 acres.

DETERMINATION

Based on the foregoing Findings of Fact, the site has been determined to be formerly used by the Department of Defense. It is therefore eligible for the Defense Environmental Restoration Program - Formerly Used Defense Sites established under 10 U.S.C. 2701, et seq.

1 Oct 93
Date

ERNEST J. HARRELL
Major General, USA
Commanding

Encl 2

PROJECT SUMMARY SHEET
FOR
DERP-FUDS OEW PROJECT F10OR017201
COLD SPRINGS PRECISION BOMBING RANGE MILITARY RESERVATION
SITE NO. F10OR017200
3 MAY 93

PROJECT DESCRIPTION: This is a former Army precision bombing range. The entire range was hilly, semi-arid grazing land which was essentially unchanged after DOD use and is currently being irrigated and farmed. A three-tower target and a pumphouse and well were constructed by DOD. The town of Hermiston, Oregon is approximately 9 miles east of the bombing range. Records indicate that the property was inspected and cleared of any ordnance prior to the cancellation of the lease and retransfer of the public domain land. Some bomb fragments have been uncovered over the years during farming activities. No evidence of the target structure or the pumphouse and well, were found.

PROJECT ELIGIBILITY: Records indicate that the area was used by the Army for precision bombing practice.

POLICY CONSIDERATIONS: There is no policy applicable to this project.

PROPOSED ACTIVITIES: The INPR should be referred to HND for a determination of further action.

RAC: Attached. The RAC score is III-D, 4.

POC: Michael Gross, CENPP-PE-DC, (503) 326-6489.

Encl 3

Form Rev. 2/10/93

RISK ASSESSMENT PROCEDURES FOR ORDNANCE AND EXPLOSIVE WASTE (OEW) SITES

Site Name: Cold Springs Precision Bomb. Range
Site Location: Umatilla County, Oregon
DERP Project #: F10OR017201
Date Completed: May 3, 1993

Rater's Name: Jerry R. Gardenhire
Phone Number: (503) 326-6488
Organization: CENPP-PE-DC
RAC: III-D RAC 4

OEW RISK ASSESSMENT:

This risk assessment procedure was developed in accordance with MIL-STD 882B and AR 385-10. The RAC score will be used by CEHND to prioritize the remedial action at this site. The OEW risk assessment should be based upon best available information resulting from records searches, reports of Explosive Ordnance Disposal (EOD) detachment actions, and field observations, interviews, and measurements. This information is used to assess the risk involved based upon the potential OEW hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability. Personnel involved in visits to potential OEW sites should view the CEHND videotape entitled "A Life Threatening Encounter: OEW."

Part I. Hazard Severity. Hazard severity categories are defined to provide a qualitative measure of the worst credible mishap resulting from personnel exposure to various types and quantities of unexploded ordnance items.

TYPE OF ORDNANCE
(Circle all values that apply)

A. Conventional Ordnance and Ammunition	VALUE
Medium/Large Caliber (20 mm and larger)	10
Bombs, Explosive	10
Grenades, Hand and Rifle, Explosive	10
Landmines, Explosive	10
Rockets, Guided Missiles, Explosive	10
Detonators, Blasting Caps, Fuzes, Boosters, Bursters	6
Bombs, Practice (w/spotting charges)	6
Grenades, Practice (w/spotting charges)	4
Landmines, Practice (w/spotting charges)	4
Small Arms (.22 cal - .50 cal)	1
Conventional Ordnance and Ammunition (Select the largest single value)	6

What evidence do you have regarding conventional OEW? Interviews with landowner indicated that bomb fragments and one live bomb have been found. During the site inspection, we saw at least five bomb fragments.

B. Pyrotechnics (For munitions not described above.)

	VALUE
Munitions (Container) Containing White Phosphorus or other Pyrophoric Material (i.e., Spontaneously Flammable)	10
Munition Containing A Flame or Incendiary Material (i.e., Napalm, Triethlaluminum Metal Incendiaries)	6
Flares, Signals, Simulators	4
Pyrotechnics Value (Select the largest single value)	0

What evidence do you have regarding pyrotechnics? No evidence of pyrotechnic OEW has been found in 20+ years of farming activity in and around the former bombing range.

C. Bulk High Explosives (Bulk explosives not an integral part of conventional ordnance; uncontainerized.)

	VALUE
Primary or Initiating Explosives (Lead Styphnate, Lead Azide, Nitroglycerine, Mercury Azide, Mercury Fulminate, Tetracene, etc.)	10
Demolition Charges	10
Secondary Explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military Dynamite	6
Less Sensitive Explosives (Ammonium Nitrate, Explosive D, etc.)	3
High Explosives (Select largest single value)	0

What evidence do you have regarding bulk explosives? No evidence of bulk explosive OEW has been found in 20+ years of farming activity in and around the bombing range.

D. Bulk Propellants (Not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized)

	VALUE
Solid or Liquid Propellants	6
Propellants	0

What evidence do you have regarding bulk propellants? No evidence of bulk propellant OEW has been found in 20+ years of farming activity in and around the bombing range.

E. Radiological/Chemical Agents/Weapons

	VALUE
Toxic Chemical Agents (Choking, Nerve, Blood, Blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control and Miscellaneous (Vomiting, Tear, incendiary and smoke)	5
Radiological/Chemical Agent/Weapons (Select the largest single value)	0

What evidence do you have regarding chemical/radiological OEW? No evidence of chemical/radiological OEW has been found in 20+ years of farming activity in and around the bombing range.

==========

Total Hazard Severity Value (Sum of Largest Values for A through E--Maximum of 61). Apply this value to Table 1 to determine Hazard Severity Category. **6**

TABLE 1

HAZARD SEVERITY

Description	Category	Value
CATASTROPHIC	I	≥ 21
CRITICAL	II	≥ 10 < 21
MARGINAL	III	≥ 5 < 10
NEGLIGIBLE	IV	≥ 1 < 5
**NONE		0

*Apply Hazard Severity to Table 3.

**If Hazard Severity Value is 0, you do not need to complete Part II. Proceed to Part III and use a RAC Score of 5 to determine your appropriate action.

Part II. Hazard Probability. The probability that a hazard has been or will be created due to the presence and other rated factors of unexploded ordnance or explosive materials on a formerly used DOD site.

AREA, EXTENT, ACCESSIBILITY OF OEW HAZARD
(Circle all values that apply)

A. Locations of OEW Hazards

	VALUE
On the surface	5
Within Tanks, Pipes, Vessels or Other confined Locations.	4
Inside walls, ceilings, or other parts of Buildings or Structures.	3
Subsurface	2
Location (Select the single largest value)	5

What evidence do you have regarding location of OEW? Interviews with the landowners and visual evidence during the site inspection determined the presence of bomb fragments.

B. Distance to nearest inhabited locations or structures likely to be at risk from OEW hazard (roads, parks, playgrounds, and buildings).

	Value
Less than 1250 feet	5
1250 feet to 0.5 mile	4
0.5 mile to 1.0 mile	3
1.0 mile to 2.0 miles	2
Over 2.0 miles	1
Distance (Select the single largest value)	2

What are the nearest inhabited structures? Farm buildings, ie. shops, crop storage buildings.

C. Numbers and types of Buildings within a 2 mile radius measured from the OEW hazard area, not the installation boundary.

	Value
26 and over	5
16 to 25	4
11 to 15	3
6 to 10	2
1 to 5	1
0	0
Number of Buildings (Select the single largest value)	1

Narrative There is one building, a shop building, north of the area where bomb fragments were found. No residences are within 2 miles.

D. Types of Buildings (within a 2 mile radius)

	Value
Educational, Child Care, Residential, Hospitals, Hotels, Commercial, Shopping Centers, etc.	5
Industrial Warehouse, etc.	4
Agricultural, Forestry, etc.	3
Detention, Correctional	2
No Buildings	0
Types of Buildings (Select the largest single value)	3

Describe types of buildings in the area. Most buildings within the 2 mile radius are farm buildings such as warehouses, barns, offices, and shops.

E. Accessibility to site refers to access by humans to ordnance and explosive wastes. Use the following guidance:

BARRIER	VALUE
No barrier or security system	5
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier, (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the facility; or An artificial or natural barrier (e.g., a fence combined with a cliff), which completely surrounds the facility; and a means to control entry, at all times, through the gates or other entrances to the facility (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the facility).	0
Accessibility (Select the single largest value)	1

Describe the site accessibility. The site is off main roads and consists mainly of irrigated crop land plus some uncultivated, sagebrush-covered range land. Except for farm personnel, there is nothing to attract anyone to the site.

F. Site Dynamics - This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion by beaches or streams, increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.

	VALUE
Expected	5
None Anticipated	0
Site Dynamics (Select the single largest value)	0

Describe the site dynamics. See above narrative about location. This is farm land and not likely to be developed for anything else that would encourage site visits by the public.

Total Hazard Probability Value
(Sum of Largest Values for A through F--Maximum of 30) 12
Apply this value to Hazard Probability Table 2 to determine Hazard Probability Level.

TABLE 2

HAZARD PROBABILITY

Description	Level	Value
FREQUENT	A	≥ 27
PROBABLE	B	≥ 21 < 27
OCCASIONAL	C	≥ 15 < 21
REMOTE	D	≥ 8 < 15
IMPROBABLE	E	≤ 8

*Apply Hazard Probability to Table 3.

Part III. Risk Assessment. The risk assessment value for this site is determined using the following Table 3. Enter with the results of the hazard probability and hazard severity values.

TABLE 3

Probability Level		FREQUENT A	PROBABLE B	OCCASIONAL C	REMOTE D	IMPROBABLE E
Severity Category:						
CATASTROPHIC	I	1	1	2	3	4
CRITICAL	II	1	2	3	4	5
MARGINAL	III	2	3	4	4	5
NEGLIGIBLE	IV	3	4	4	5	5

RISK ASSESSMENT CODE (RAC)

RAC 1 Imminent Hazard - Expedite INPR - Immediately call CEHND-ED-SY--commercial 205-955-4968 or DSN 645-4968.

RAC 2 High priority on completion of INPR - Recommend further action by CEHND.

RAC 3 Complete INPR - Recommend further action by CEHND.

RAC 4 Complete INPR - Recommend further action by CEHND.

RAC 5 Recommend no further action. Submit NOFA and RAC to CEHND.

Part IV. Narrative. Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions you made.

Based on our preliminary site inspection and telephone interviews with the landowners, there is evidence of the site's past use as a bombing range. There are approximately 5 bomb fragments located southeast of the Mikami Farms half-circle #16, and they report finding new materials every one or two years, during plowing.

CONTACT LISTING

1. Umatilla County, Oregon

   a. Contact Name: Senior Deputy Harndon

   b. Address: County Courthouse, 216 SE 4th, Pendleton, Oregon 97801

   c. Telephone Number: (503) 276-7111

   d. Interview Information:

   Deputy Harndon didn't know anything about the site, including that there was a bombing range there. He hasn't heard of anything being found there.

2. Private Parties

   a. Contact Name: Mr. Sach Mikami (Landowner)

      (1) Address: P.O. Box 780, Hermiston, Oregon 97833

      (2) Telephone Number: (503) 449-3811

      (3) Interview Information: Mr. Mikami said that they have owned the property for 20 years or so and that they found some bomb fragments early during their development of the property, but not much lately. He did say that they had a steel tower on the property that they gave to the Hermiston Airport for its beacon tower. He didn't remember any other structures. During our site inspection, we saw approximately 5 bomb "bodies" buried southeast of Mikami's circle #16. Apparently, they hook the "bodies" while plowing, then at the end of the plow swath, they shake the "bodies" off. That is how the debris we saw got there. Mr. Mikami's assistant who showed us around the site said that he saw one bomb hooked by a plow and some white powder escaped.

   b. Contact Name: Mr. Walt McDevitt (Landowner)

      (1) Address: P.O. Box 93, Hermiston, Oregon 97833

      (2) Telephone Number: (503) 567-8263

      (3) Interview Information: Mr. McDevitt said that they have owned the property for 20 years or so and that they found some large caliber (50 cal.?) casings but no bomb fragments early during their development of the property, but nothing lately. During our site inspection, we spoke to Steve Fritz in Mr. McDevitt's absence, and he told us that the property is owned by Mr. McDevitt but has been leased to John Walchli [(503) 567-5842] since the land was developed for irrigated farming.

Encl 4

APPENDIX E

LETTERS / MEMORANDA / MISCELLANEOUS ITEMS

ORDNANCE AND EXPLOSIVE WASTE
CHEMICAL WARFARE MATERIALS
ARCHIVES SEARCH REPORT
FINDINGS
for the former
COLD SPRINGS PRECISION BOMBING RANGE
Umatilla County, Oregon

Project Number F10OR017201

APPENDIX E

LETTERS/MEMORANDA/MISCELLANEOUS ITEMS

E-1 Letter, from Assistant Chief of Engineers for Real Estate, Portland, OR, to Director, Bureau of Land Management, Department of the Interior, Washington, D.C., dated 19 November 1947, regarding Cold Springs Bombing Range.

E-2 Letter, from the Regional Grazier, Bureau of Land Management, Department of the Interior, Swan Island Station, Portland, OR, to Division Engineer, War Department, Corps of Engineers, Portland, OR, dated 18 July 1947, regarding Cold Springs Bombing Range.

E-3 Military Letter, from the Adjutant General, Headquarters, Walla Walla Army Air Field, WA, to Commanding General, Fourth Air Force, San Francisco, CA, dated 13 October 1944, Subject: Fire Prevention Measures at Bombing and Gunnery Ranges.

E-4 Military Manuscript, History of the Walla Walla Army Air Field, 1 May to 31 May 1945, prepared by the Historian, 423rd Army Air Force Base (H), Walla Walla, WA, for Headquarters, Fourth Air Force, in June 1945.

E-1

Letter, from Assistant Chief of Engineers for Real Estate, Portland, OR,
to Director, Bureau of Land Management, Department of the Interior,
Washington, D.C., dated 19 November 1947, regarding Cold Springs Bombing Range.

EG/lj

HO'N

LBK

GFM

602 Cold Springs Bombing
Range, Oregon. ENGLT

19 November 1947

Director,
Bureau of Land Management,
Department of Interior,
Washington 25, D.C.

Dear Sir:

Reference is made to Executive Order No. 9042, dated 26 January 1942, authorizing the Department of the Army to use certain lands in Umatilla County, Oregon, for the Cold Springs Bombing Range, Oregon.

A portion of the lands covered by Executive Order No.9042 is no longer required by this Department and jurisdiction thereof is hereby relinquished. The lands are described as the E½ of Section 6, Township 4 North, Range 30 East, Willamette Meridian, in Umatilla County, Oregon, containing 310.35 acres.

The lands have been examined and have been cleared of all explosives or explosive objects reasonably possible to detect by visual inspection. No restoration work is deemed necessary by the Department. Inclosed is a copy of letter dated 18 July 1947, from the Acting Regional Grazier, Swan Island Station, Portland, Oregon, stating that the lands are in satisfactory condition.

Your cooperation is making these lands available to this Department is appreciated.

FOR THE CHIEF OF ENGINEERS:

Sincerely yours,

PETER P. GOERZ
Colonel, Corps of Engineers
Assistant Chief of Engineers for Real Estate

E-2

Letter, from the Regional Grazier, Bureau of Land Management, Department of the Interior, Swan Island Station, Portland, OR, to Division Engineer, War Department, Corps of Engineers, Portland, OR, dated 18 July 1947, regarding Cold Springs Bombing Range.

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Swan Island Station
Portland 18, Oregon

L
USES
War Dept
Cold Springs Bombing Range
O-7

July 18, 1947

Division Engineer
War Department
Corps of Engineers
500 Pitcock Block
Portland 5, Oregon

Dear Sir:

Attention: Real Estate Division

Reference is made to the Cold Springs Bombing Range Use Permit, Executive Order No. 9042, near Hermiston, Oregon.

Since all installations placed on the land for war purposes have been removed and the area made safe for civilian use, it is desireableand agreeable with this service that the area be returned to Federal Range status and used for grazing purposes.

Very truly yours,

Kelso P. Newman,
Regional Grazier.

By /s/
Maurice W. March
Acting

cc: District Grazier
Baker Oregon

COPY COPY COPY

(Note: EO 9042 covers 310.36 acres at Cold Springs BR, Oregon and 640 acres at Boardman BR, Oregon)

Area involved: Sec 20, T4N,R24E, Willamette Meridian, in Morrow Co., Ore.)

E-3

Military Letter, from the Adjutant General, Headquarters, Walla Walla Army Air Field, WA, to Commanding General, Fourth Air Force, San Francisco, CA, dated 13 October 1944, Subject: Fire Prevention Measures at Bombing and Gunnery Ranges.

COLD SPRINGS RANGE

HEADQUARTERS
WALLA WALLA ARMY AIR FIELD
WASHINGTON

DO/HRR/aw

319.1

OCT 13 1944

SUBJECT: Fire Prevention Measures at Bombing and Gunnery Ranges.

TO : Commanding General, Fourth Air Force, 180 New Montgomery Street, San Francisco 6, California.

HQ, 4th AIR FORCE 684 16 OCT 1944

1. In compliance with TWX, your Headquarters, 4AFES 4291, dated 30 June 1944, the information below on fire prevention measures on bombing and gunnery ranges for third quarter of 1944 is submitted.

2. During the months of June and July 1944, there were more than thirty (30) fires on or near the Boardman and Cold Springs Bombing Ranges. The origin of the majority of these fires was definitely established as being caused by M38-A2 practice bombs dropped during training missions from this base.

3. The following measures have been taken at the Boardman and Cold Springs Ranges for future security:

a. A firebreak ten (10) feet wide completely incloses both range boundaries, except on the north side of Boardman where the irrigation canal serves as a natural barrier. This was completed 14 July 1944.

b. All range roads were reconditioned during July to permit rapid transportation of men and equipment to any threatened area.

c. Chemical Warfare equipped a 6 x 6 truck with an M-4 power-driven decontamination unit, thus providing the range with mobile fire-fighting equipment suitable by virtue of six (6) wheel drive for the rough terrain of the range. The capacity of the tank is four hundred (400) gallons of water. The pumping apparatus permits a flow of thirty-five (35) gallons per minute. The effective radius of the water stream is thirty (30) feet. This equipment has proven invaluable for range conditions and was delivered to the range on or about 1 August 1944.

d. Letter from Commanding Officer, this Headquarters, dated 9 July 1944, to the Commanding Officer of the Umatilla Ordnance Depot requested assistance in combating range fires between Cold Springs Reservoir and the Ordnance Plant. Reply by first indorsement thereto, dated 25 July 1944, promised aid on fires beyond control of the Boardman Range Detachment, and the Boardman Range Officer was contacted for subsequent necessary planning.

BASIC: Ltr, Hq, WWAAFLD, Wash, Sub "Fire Prevention Measures at Bombing and Gunnery Ranges,"

e. Allotment of range personnel was increased to twenty-five (25) enlisted men and one (1) officer.

f. Safety and radio procedures for bombing aircraft causing or observing fires at the bombing ranges were outlined in letters, dated 30 June and 14 August 1944, from the Staff Bombing Officer to the Training Sections.

3. Future precautions, not yet complete, consist of the following:

a. Increase width of the firebreaks to one thousand (1000) feet. This will be accomplished by two (2) ten (10) foot strips cut by the bulldozer one thousand (1000) feet apart, and the resulting area between burned over periodically.

b. Base a brush truck at the Umatilla Ordnance Depot for use in any threatened area. Truck is available and is awaiting transfer.

c. Plans for civilian assistance through the District Grazier (State Official) have been formulated.

d. Increase of range personnel to thirty-six (36) enlisted men and one (1) officer has been requested.

e. Heavy duty equipment and an operator have been requested for permanent assignment to the Boardman Range for the purpose of maintaining range roads.

For the Commanding Officer:

JOHN FORD
1st Lt., Air Corps
Adjutant

NFF
11/1/44
Cpl

W107

E-4

Military Manuscript, History of the Walla Walla Army Air Field,
1 May to 31 May 1945, prepared by the Historian, 423rd Army Air Force Base (H),
Walla Walla, WA, for Headquarters, Fourth Air Force, in June 1945.

RESTRICTED

HISTORY OF THE

WALLA WALLA ARMY AIR FIELD

1 May to 31 May 1945

Prepared in June 1945 in compliance with AR 345-108, AAF Regulation 20-8, Directive Memo 80-1, Headquarters Fourth Air Force.

Walla Walla, Washington

423d Army Air Force Base Unit (H)

SOURCE: Maxwell
RG: 289.53-15 289.53.19
SERIES: AAG-Jun 45 22 Jun 43
BOX: 5
FOLDER: Walla Walla

AUTHORIZED BY:

Joel E. Lawhon
JOEL E. LAWHON,
1st Lt., Air Corps,
Historical Officer.

APPROVED:

Bertram C. Harrison
BERTRAM C. HARRISON,
Colonel, Air Corps,
Commanding.

RESTRICTED

Two (2) accidental bomb releases occurred during the month near the Cold Springs Bombing Range. One was due to release in extended vision by the lead bombardier of a six (6) ship formation. A total of fifteen (15) bombs were released on the erroneous lead bombs. Representatives of the Armament Section and Legal Office located all bombs and disposed of the unexpended rounds. No damage to civilian personnel or property was reported. The second accidental release was a result of improperly adjusted bombrack controls. The exact location of the bombs was not and has not been determined and no reports from civilians in the area have as yet been received. In an effort to minimize the number of future accidental releases, a consolidation of Base Bombing Regulations was read to all combat crews, and a certificate signed by the airplane commander and bombardier of each crew signifying that he had read and understood the regulations. As a further precaution, Armament was requested to check all bomb release systems for maladjustment.

Construction of sonic scoring systems on both the Moses Lake and Boardman Bombing ranges was initiated during the month. Completion for all targets was set at sixty (60) days from starting dates.

First Lieutenants Lankford and Perry left to attend the Central Instructor's School for instructor bombardiers at Midland, Texas. A quota of six (6) officers, specified overseas returnees, has been allotted the field.

Bombing requirements for the Proficiency Crews assigned Training Section II were established by the Director of Operations as follows:

APPENDIX F

REAL ESTATE DOCUMENTS

ORDNANCE AND EXPLOSIVE WASTE
CHEMICAL WARFARE MATERIALS
ARCHIVES SEARCH REPORT
FINDINGS
for the former
COLD SPRINGS PRECISION BOMBING RANGE
Umatilla County, Oregon

Project Number F10OR017201

APPENDIX F -- REAL ESTATE DOCUMENTS

The archive search did not locate any real estate documents that contradicted or modified the information contained in the Inventory Project Report (INPR) for Cold Springs Precision Bombing Range. Complementary real estate documents were gathered and reviewed, but are not presented here. These documents will be stored with all the original ASR information.

APPENDIX G

NEWSPAPERS / JOURNALS
NOT USED

APPENDIX H

INTERVIEWS

ORDNANCE AND EXPLOSIVE WASTE
CHEMICAL WARFARE MATERIALS
ARCHIVES SEARCH REPORT
FINDINGS
for the former
COLD SPRINGS PRECISION BOMBING RANGE
Umatilla County, Oregon

Project Number F10OR017201

APPENDIX H -- INTERVIEWS

Interviews/Contacts	Position/Organization
Sach Mikami	Farm Owner/Manager Hermiston, OR (503) 449-3811
John Walchli	Farm Owner/Manager Hermiston, OR (503) 567-5842
Voyd Stewart	Farmer Manager, Mikami Farms Hermiston, OR (503) 567-7603
Randy Dorran	Farm Owner Helix, OR (503) 457-2565
SFC Riley	NCO, EOD 53rd Ordnance Detachment Yakima Training Center Yakima County, Washington (509) 577-3377
Ross Patrick	Retired Game Officer Hermiston, OR (Contact through Michael Patrick, Umatilla Army Depot (503) 564-5246)

Other Contacts

Bob Addleman
Soil Conservation Service
Pendleton, OR 97801
(503) 278-3835

Dan Aiken
Equipment Manager
Vehicle & Equipment Dispatch Office
Umatilla Army Depot, OR
(503) 564-5246

Barb Bishop
Umatilla County Planning Office
Umatilla County, OR
(503) 276-7111

Blue Mountain Community College
Umatilla County, OR
(503) 276-1260

Bob Bostawick
U.S. Farms Service Agency
Umatilla County, OR
(503) 278-3832

Rich Cahoon
QASAS, Umatilla Army Depot
Umatilla County, OR
DSN 790-5212

City Hall
City of Hermiston
180 N.E. 2nd Street
Hermiston, OR 97838

Eastern Oregon State University
(503) 962-3672

Tom Hilliard
Library Director
Pendleton Public Library
Pendleton, OR 97801
(503) 276-1881

Michael Patrick
Vehicle & Equipment Dispatch Office
Umatilla Army Depot, OR
(503) 564-5246

Michaele Pelzer
District Manager
Umatilla County Soil & Water Conservation District
1229 S.E. Third
Pendleton, OR 97801
(503) 278-3835

Pendleton Chamber of Commerce
25 S.E. Dorion
Pendleton, OR 97801
(800) 547-8911

Hal Phillips
Umatilla County Road Engineers
Umatilla County, OR
(503) 278-5424

Julie Reese
Curator
Umatilla County Historical Society & Museum
Pendleton, OR
(503) 276-0012

Mike Wilson
Detective, Oregon State Police
Sheriff's Department
Hermiston, OR 97838
(503) 567-2346

Reference Librarian
Blue Mountain Community College
Pendleton, OR 97801
(503) 276-1260

Umatilla City Library
Umatilla, OR
(503) 922-5704

Umatilla Refuge
Umatilla County, OR
(503) 922-3232

TELEPHONE OR VERBAL CONVERSATION RECORD

DATE 4-May-1995

For use of this form, see AR340-15; the proponent agency is the Adjutant General's Office.

SUBJECT OF CONVERSATION
COLD SPRINGS BOMBING RANGE, Umatilla County, Oregon

INCOMING CALL		
PERSON CALLING	ADDRESS	PHONE NUMBER AND EXTENSION
SFC Riley	53rd Ordnance Detachment (EOD) Yakima Training Center Yakima County, Washington	(509) 577-3377
PERSON CALLED	OFFICE	PHONE NUMBER AND EXTENSION
Frederick T. Miller Historian/Archivist	CELMS-PD-R	(314) 331-8792

OUTGOING CALL		
PERSON CALLING	ADDRESS	PHONE NUMBER AND EXTENSION
PERSON CALLED	OFFICE	PHONE NUMBER AND EXTENSION

SUMMARY OF CONVERSATION:

On 20 April, I received a return telephone call from SFC Riley, who I attempted to contact earlier regarding his detachment's records regarding Cold Springs Bombing Range. The 53rd Ordnance Detachment (EOD) has geographic responsibility for Umatilla County. Prior to 1972, the 62nd Ordnance Detachment (EOD) had responsibility for the region before its reassignment to Utah. SFC Riley stated to his knowledge his detachment "had received no calls from Hermiston" on findings of UXO. I spoke in detail with SFC Riley about my interview with Mr. Walchli, who now leases a portion of the former Cold Springs Bombing Range. I specifically mentioned the statement made to me by Mr. Walchli regarding "40 to 50 bombs" being found on the property he now leases. SFC Riley said the time period was "way beyond the file requirements of his detachment records". He could only assure me from his own personal knowledge that his detachment has not responded to calls regarding the Cold Springs Bombing Range "within at least the 5 past years". Despite the lack of records, SFC Riley "guaranteed no range clearance was given" for the Cold Springs Bombing Range. After I inquired further about his certainty on no range clearance, SFC Riley said he based his statement on his own professional opinion. (end of telephone conversation)

FORM DA751

APPENDIX I

PRESENT SITE PHOTOGRAPHS

ORDNANCE AND EXPLOSIVE WASTE
CHEMICAL WARFARE MATERIALS
ARCHIVES SEARCH REPORT
FINDINGS
for the former
COLD SPRINGS PRECISION BOMBING RANGE
Umatilla County, Oregon

Project Number F10OR017201

APPENDIX I -- PRESENT SITE PHOTOGRAPHS

#1 John Walchli's live 37mm projectile.
Found approximately 20 years ago in irrigation circle #20.

#2 Practice bomb with fuze assembly found in irrigation circle #22.

#3 Sand filled practice bomb - vicinity of irrigation circles #22 and #16

#4 Practice bomb remnants observed in the vicinity of irrigation circles

#5 Various practice bomb remnants (circles 16 and 22).

#6 Practice bomb remnants - irrigation circles 16 and 22.

#7 Various practice bomb remnants.

#8 Various practice bomb remnants found near irrigation circles #16 and #22.

#9 Practice bomb remnants.

APPENDIX J

HISTORICAL PHOTOGRAPHS
NOT USED

APPENDIX K

HISTORICAL MAPS / DRAWINGS
NOT USED

APPENDIX L

SITE SAFETY AND HEALTH PLAN / SITE INSPECTION REPORT

SITE SPECIFIC SAFETY AND HEALTH PLAN (SSHP)
OE/CWM Archives Search Site Inspection Visit
Cold Springs Precision Bombing Range
Umatilla County, Or
Site F100R017200

1. REFERENCES:

a. Safety Manual, CELMS-PM-M, 16 Sep 93 w/ Ch1.

b. SOP for Reporting Ordnance and Unexploded Ordnance (UXO), CELMS-PM-M, 19 Jan 95.

c. OEW Guidance Regarding Coordination with EOD Organizations, 10 Jan 95.

2. GENERAL: This plan prescribes the safety and health requirements for team activities and operations conducted to determine the presence of ordnance and explosive waste and /or chemical warfare materials at the specified site.

a. The Safety Officer has final authority on all matters relating to safety. The safety rules will be followed at all times. Any member of the team may stop operations if they observe a situation or activity which poses a potential hazard to any individual or to the operation. All actions must comply with the common sense rule!

b. All team members will be aware of the local emergency numbers and the location of the nearest telephone.

c. A minimum of two and a maximum of eight persons will be allowed on-site at any one time.

d. The property owner is not required to sign the SSHP, but should be politely asked to participate in the safety briefing.

3. MISSION: Reconnoiter, document, and photograph areas on Cold Springs Precision Bombing Range, Oregon, suspected to be contaminated with UXOs and possible toxic Chemical Warfare Material. The bombing range is 9 miles east of Hermiston.

4. SAFETY PRECAUTIONS: All team members will stay within sight of each other while on site. A first aid kit will be on hand. The following three basic safety rules apply at all times:

a. Rule 1 - Do not touch or pick up anything at the site.

b. Rule 2 - Do not step anywhere you cannot see where you place your foot.

c. Rule 3 - There will be no eating or smoking at the site. Hands will be washed after the survey and prior to eating. Drinking fluids should be done during periodic breaks.

5. SITE COMMUNICATIONS: The primary means of communicating with other team members will be by voice. Team members will always remain within sight of each other. Cellular telephones should be carried to facilitate and expedite calling for emergency medical services.

6. NATURAL HAZARDS: Site is high desert climate, approximately 5000 ft elevation, cold, dry with possible snow. Dehydration and exhaustion. Insects, such as ticks, wasp and yellowjacket are a concern at this time of the year. Wildlife should be avoided. Slips, Trips and Falls.

7. ORDNANCE HAZARDS: Bombs (HE & Practice).

8. HAZARD EVALUATION: Estimate the overall hazards using the following guidelines: (check appropriate item)

[ ] Low (small arms ammunition)
[ ] Moderate (practice bombs with spotting charge)
[X] High (high explosive munitions, toxic chemicals, WP)
[ ] Unknown

9. EMERGENCY PROCEDURES: First aid will be rendered for any injuries. In the event of a detonation, everyone should freeze until the situation can be assessed by the team leader. Unnecessary injuries can be avoided by not panicking and planning a logical course of action, which may include retracing your steps out of an impact area. Emergency medical services will be contacted by the most expeditious means available.

10. SAFETY STATEMENT: Safety is everyone's business. No unnecessary risks will be taken to obtain photos or other data. Team members are responsible for notifying the project Manager or safety Officer of any physical conditions that may impede or prevent their accomplishment of the mission. An example is allergic reactions to bee stings.

Important Phone Numbers

All Emergencies:	911
Umatilla County Sheriffs Office:	(503) 567-2346X
Good Shepard Hospital:	(503) 567-6483
Huntsville Safety:	(205) 895-1582/1579
	(800) 627-3532, PIN 777-2534
Cellular Phone (Gilmore):	(314) 630-5814
Corps of Engineers St Louis:	(314) 331-8036
548th EODCT	(206) 967-1971

SSHP reviewed by: GEORGE SLOAN

Encls
1. Safety Briefing Attendance
2. Safety gear

SITE SURVEY SAFETY BRIEFING

Date: 5/12

PPE	**Site Hazards**
✓ Work Clothing	✓ OEW
✓ Gloves	___ CWM
___ Hardhat	___ HTW
___ Hearing protection	✓ Slips, falls, trips
___ Safety shoes	✓ Wildlife
___ Safety glasses	✓ Vegetation

Weather Precautions

✓ Cold/Heat
___ Severe Weather

Additional Topics: _____

_____

Safety Briefing Attendance

All team members and any accompanying personnel will be briefed and sign this form:

Print Name and Organization	**Signature**
CHARLES John DALY PD-AR	C. John Daly
Fred Muller PD-R FRED MILLER	Fred Muller
DENNIS W. GILMORE PM-M	
Randy L Fraser PM-M	

MANDATORY MINIMUM SAFETY GEAR

First aid kit (individual)	✓
Survival kit	✓
Fire starter	✓
Space blanket	✓
Whistle	✓
Mirror	✓
Cellular phone	✓
Flash light	✓
Survey tape	✓
Canteen	✓

APPENDIX M

REPORT DISTRIBUTION LIST

ORDNANCE AND EXPLOSIVE WASTE
CHEMICAL WARFARE MATERIALS
ARCHIVES SEARCH REPORT
FINDINGS
for the former
COLD SPRINGS PRECISION BOMBING RANGE
Umatilla County, Oregon

Project Number F10OR017201

APPENDIX M -- REPORT DISTRIBUTION LIST

Addressee	No. Copies
Commander, U.S. Army Engineer Division Huntsville, ATTN: CEHND-ED-SY-A P.O. Box 1600 Huntsville, Alabama 35807-4301	2
Commander, U.S.Army Chemical Materiel Destruction Agency Attn: SFIL-NSM, Bldg. E4585 Aberdeen Proving Ground, MD 21010	1
Commander, U.S. Army Chemical & Biological Defense Command Attn: AMSCB-CIH, Bldg. E5183 Aberdeen Proving Ground, MD 21010-5423	1
U.S. Army Technical Center for Explosives Safety Attn: SMCAC-ESM Savanna, Il 61074-9639	1
Commander, U.S. Army District, Portland Attn: CENPP-PE-DC P.O. Box 2946 Portland, OR 97208-2946	1
CELMS-ED-G	1
CELMS-ED-H	1
CELMS-PD-A	1
CELMS-PM-M	1

REPORT PLATES

ORDNANCE AND EXPLOSIVE WASTE
CHEMICAL WARFARE MATERIALS
ARCHIVES SEARCH REPORT
FINDINGS
for the former
COLD SPRINGS PRECISION BOMBING RANGE
Umatilla County, Oregon

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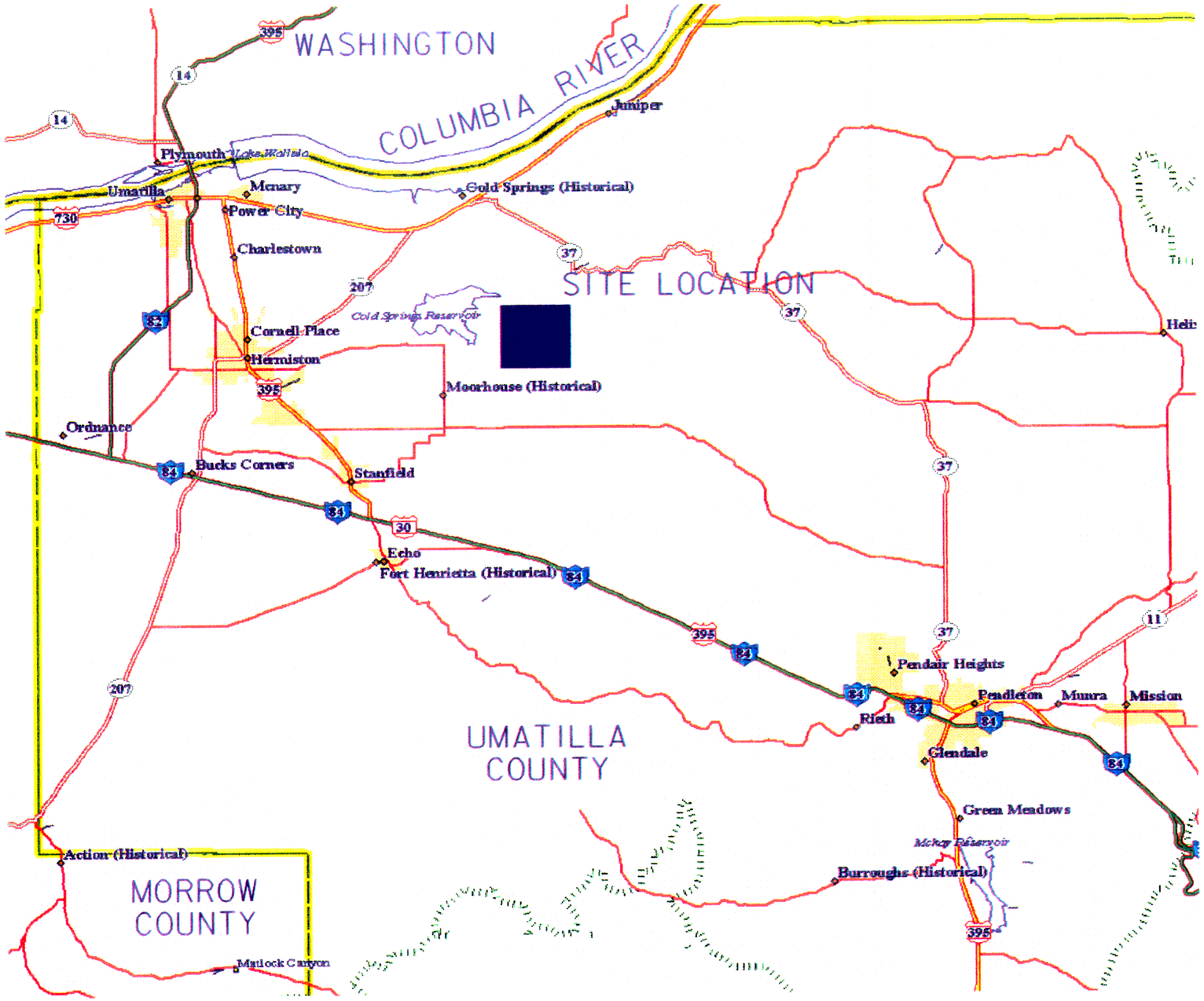
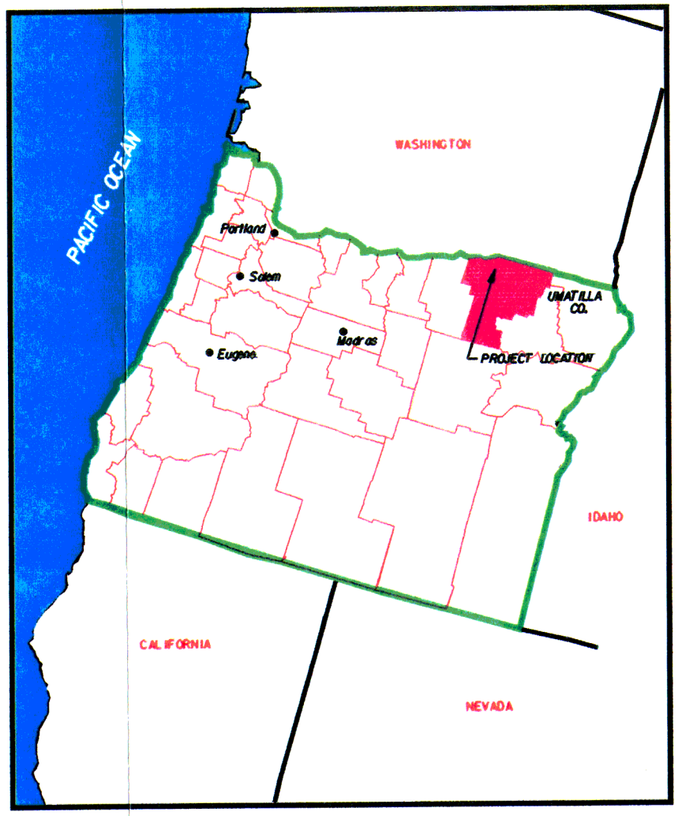
REPORT PLATES





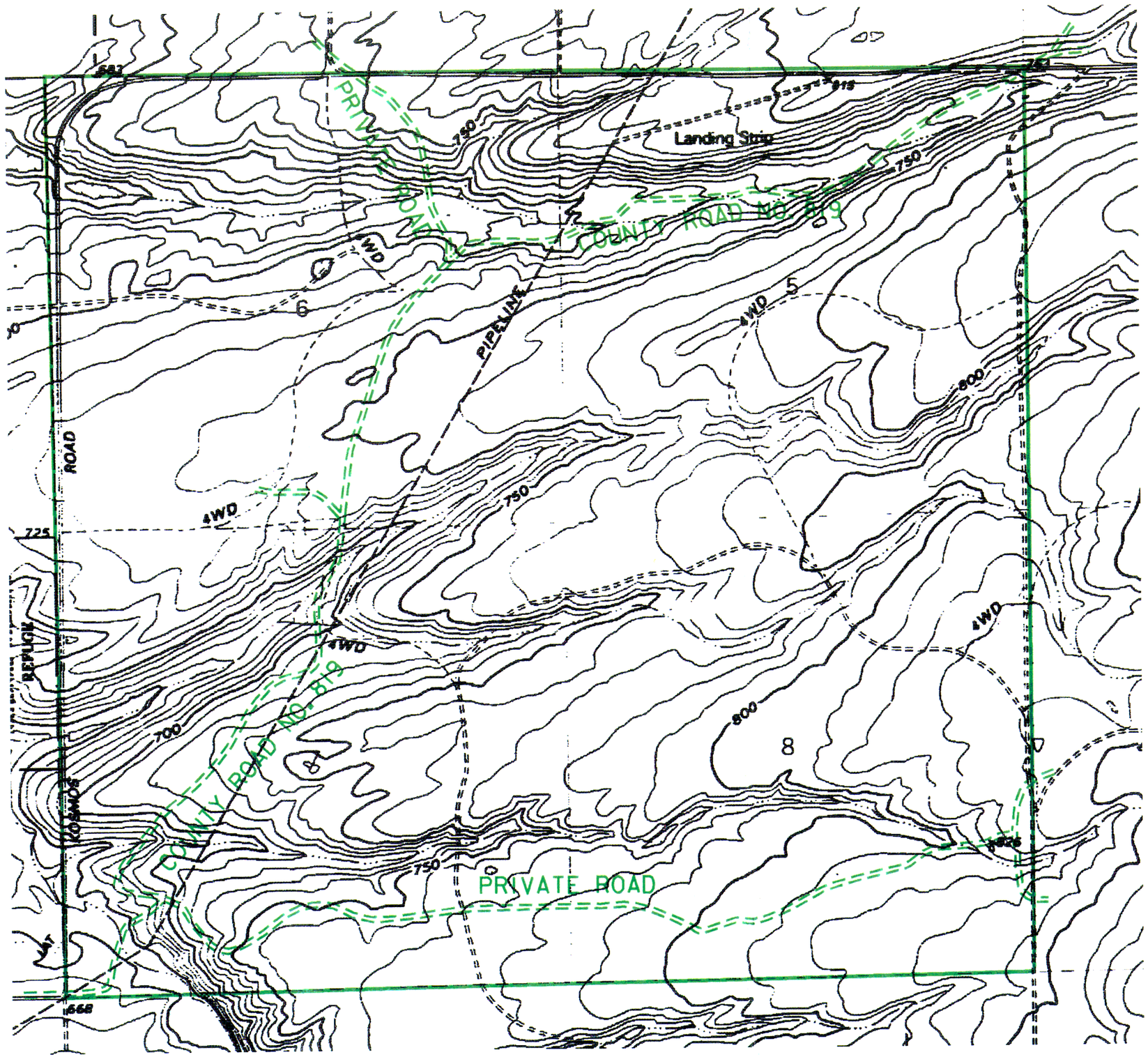
N

NOT TO SCALE

RP-1

COLD SPRINGS BOMBING TARGET
UMATILLA COUNTY, OREGON
DERP-FUDS# F10OR017201
VICINITY MAP

PROJ. DATE: JUN 1995	DATE OF MAP: 1993
14-JUN-1995 11:13	/N/OEW95C/G20/MAP/COLDVIC.DGN & .EXT



LEGEND

SITE BOUNDARY

ROADS TAKEN FROM 1945 REAL ESTATE MAP

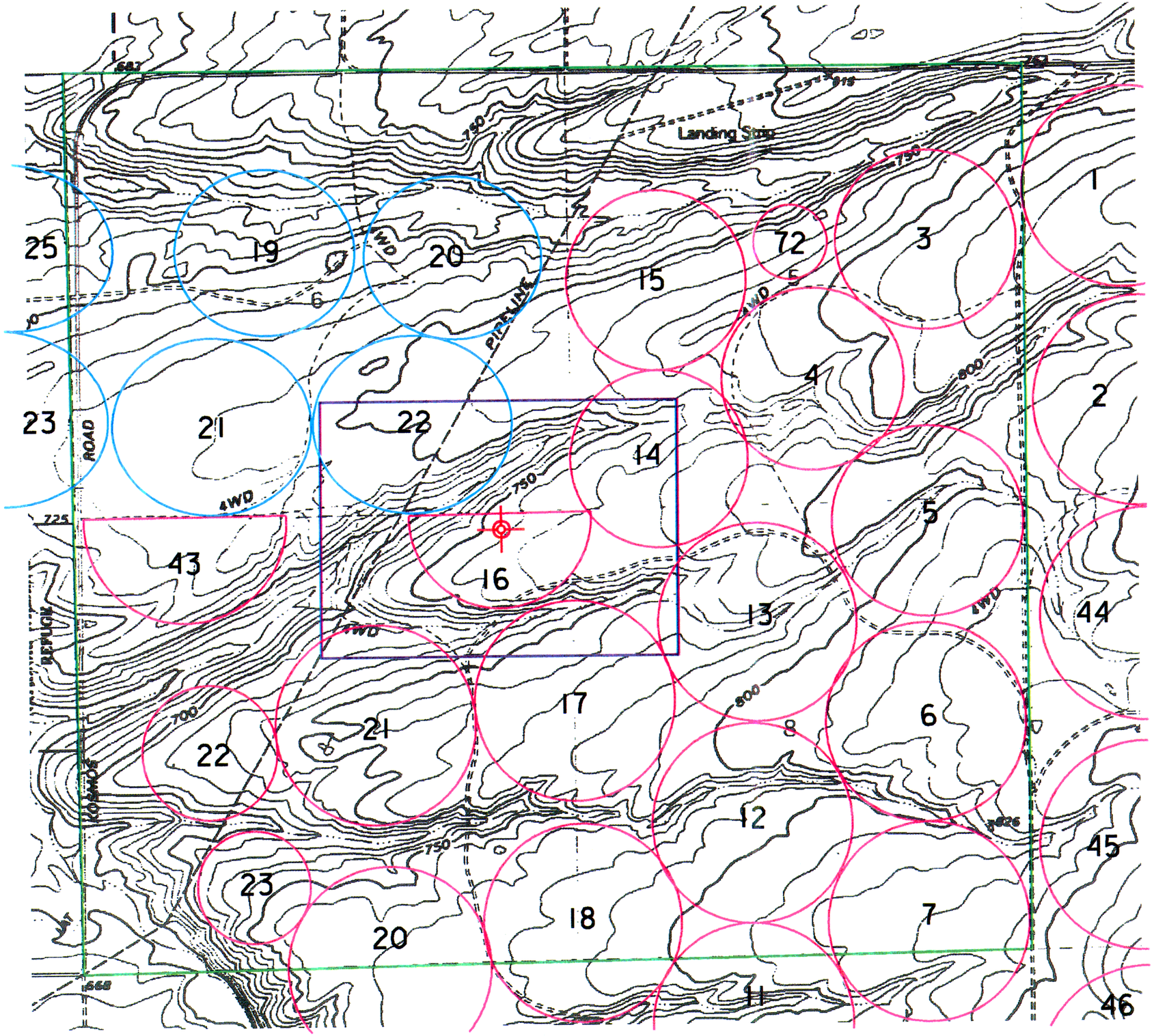
N

NOT TO SCALE

RP-2

COLD SPRINGS BOMBING TARGET
UMATILLA COUNTY, OREGON
DERP-FUDS* F10OR017201
SITE MAP

PROJ. DATE: JUN 1995	DATE OF MAP: 1993
5-JUN-1995 14:11	/N/OEW95C/G24/QUAD/SITE.DGN & COLDQUAD.CIT



LEGEND

- SITE BOUNDARY
- AREA OF HEAVIEST CONCENTRATIONS
- TARGET TAKEN FROM 1971 AERIAL PHOTO
- IRRIGATION CIRCLE- WALCHLI FARMS
- IRRIGATION CIRCLE- MIKAMI FARMS

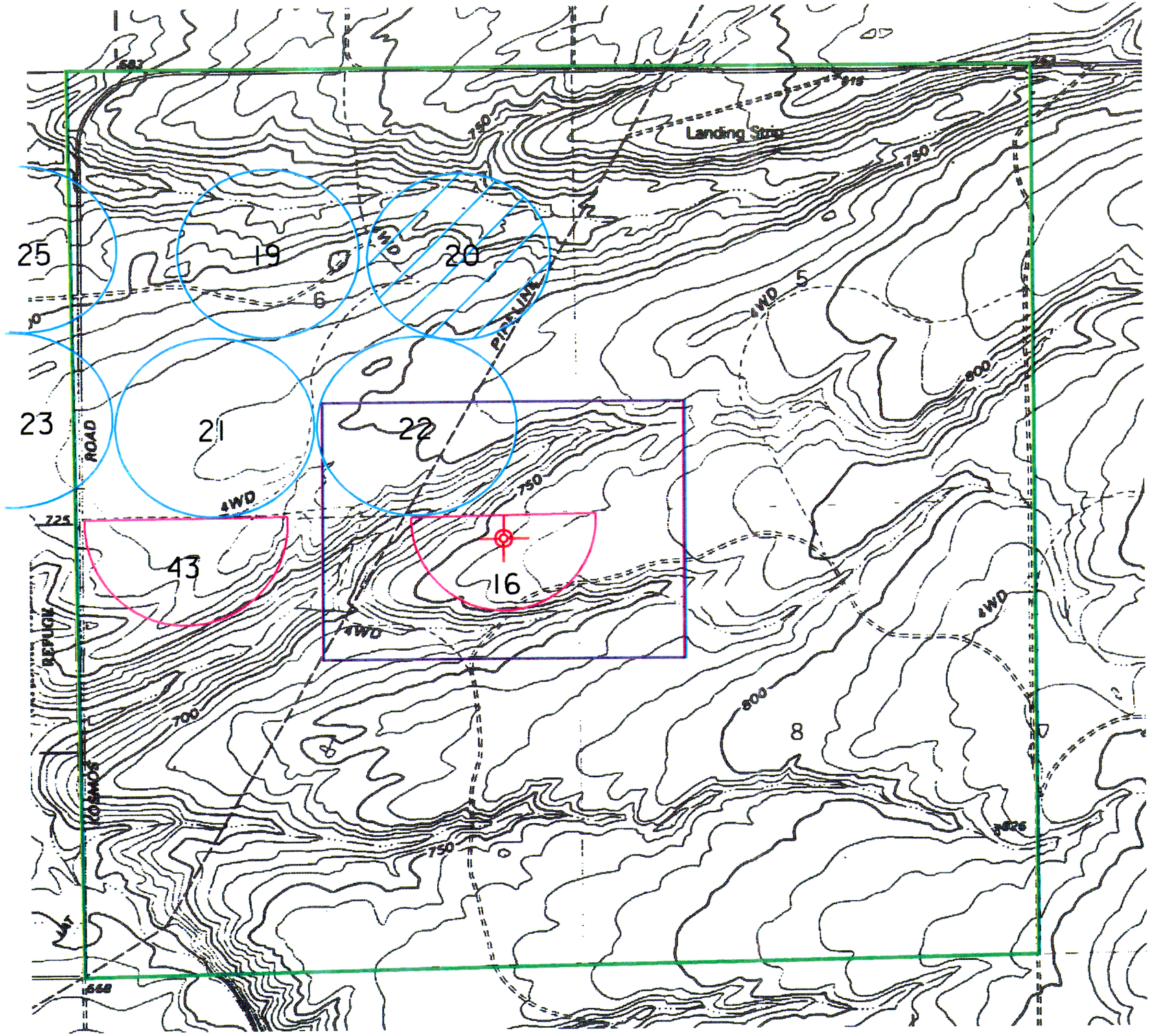
N

NOT TO SCALE

RP-3

COLD SPRINGS BOMBING TARGET
UMATILLA COUNTY, OREGON
DERP-FUDS* F10OR017201
CURRENT SITE MAP

PROJ. DATE: JUN 1995	DATE OF MAP: 1993
19-JUN-1995 12:27	/N/OEW95C/G24/QUAD/CURRSITE.DGN & COLDQUAD.CIT



LEGEND

- SITE BOUNDARY
- AREA OF HEAVIEST CONCENTRATION
- TARGET TAKEN FROM 1971 AERIAL PHOTO
- IRRIGATION CIRCLE- WALCHLI FARMS
- IRRIGATION CIRCLE- MIKAMI FARMS
- 37mm PROJECTILE RECOVERED

N

NOT TO SCALE

RP-4

COLD SPRINGS BOMBING TARGET
UMATILLA COUNTY, OREGON
DERP-FUDS* F10OR017201
FINDINGS

PROJ. DATE: JUN 1995	DATE OF MAP: 1993
19-JUN-1995 12:31	/N/OEW95C/G24/QUAD/FINDINGS.DGN & COLDQUAD.CIT

FEATURE NO.	FEATURE DESCRIPTION
1	AERIAL BOMBING TARGET WITH A NUMBER 4 NEXT TO IT.
2	SMALL ELIPTICAL SHAPED TARGET OR DIRECTIONAL MARKER.

LEGEND

FEATURE LOCATION

N

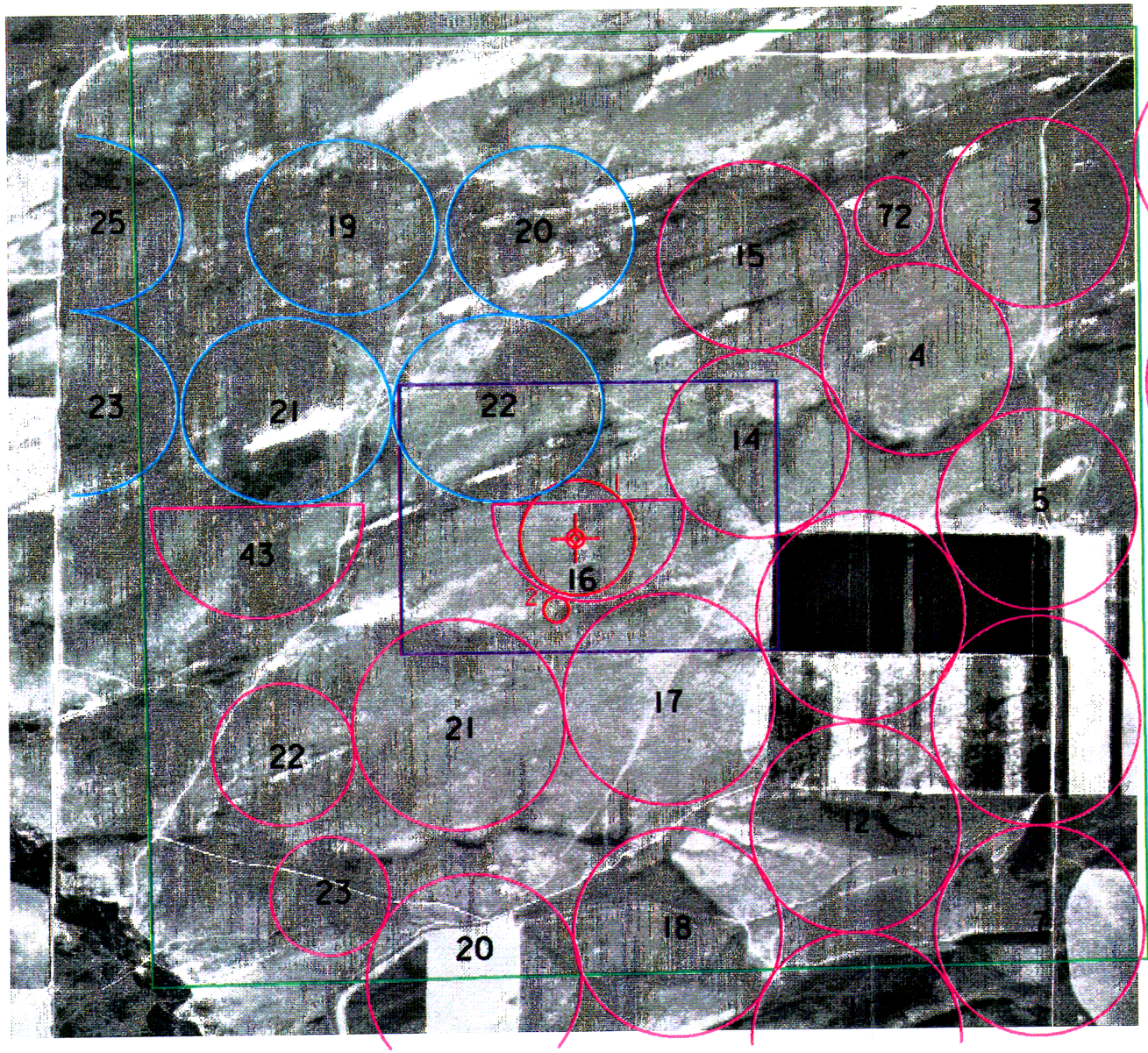
NOT TO SCALE

RP-5

COLD SPRINGS BOMBING RANGE
UMATILLA COUNTY, OREGON
DERP-FUDS* F10OR017201
AERIAL PHOTO

PROJ. DATE: JUN 1995	DATE OF PHOTO: 27 JUN 1950
26-JUN-1995 14:18	/N/OEWUTIL/ZCOLD50.DGN, /N/OEW95AB/SH48/PHOTO/ZCOLD50.EXT

FEATURE NO.	FEATURE DESCRIPTION
1.	A FADED AERIAL BOMBING TARGET WITH ALMOST UNRECOGNIZEABLE 4 NEXT TO IT.
2.	A FADED SMALL ELIPTICAL SHAPED TARGET OR DIRECTIONAL MARKER.



1

2

44

45

46

LEGEND

- SITE BOUNDARY
- AREA OF HEAVIEST CONCENTRATIONS
- TARGET TAKEN FROM 1971 AERIAL PHOTO
- IRRIGATION CIRCLE- WALCHLI FARMS
- IRRIGATION CIRCLE- MIKAMI FARMS
- FEATURE LOCATION

N

NOT TO SCALE

RP-6

COLD SPRINGS BOMBING RANGE
UMATILLA COUNTY, OREGON
DERP-FUDS* F10OR017201
AERIAL PHOTO

PROJ. DATE: JUN 1995	DATE OF PHOTO: 22 MAY 1971
27-JUN-1995 10:43	/N/OEWUTIL/ZCOLD71.DGN & /N/OEW95C/G24/PHOTO/ZCOLD71.EXT